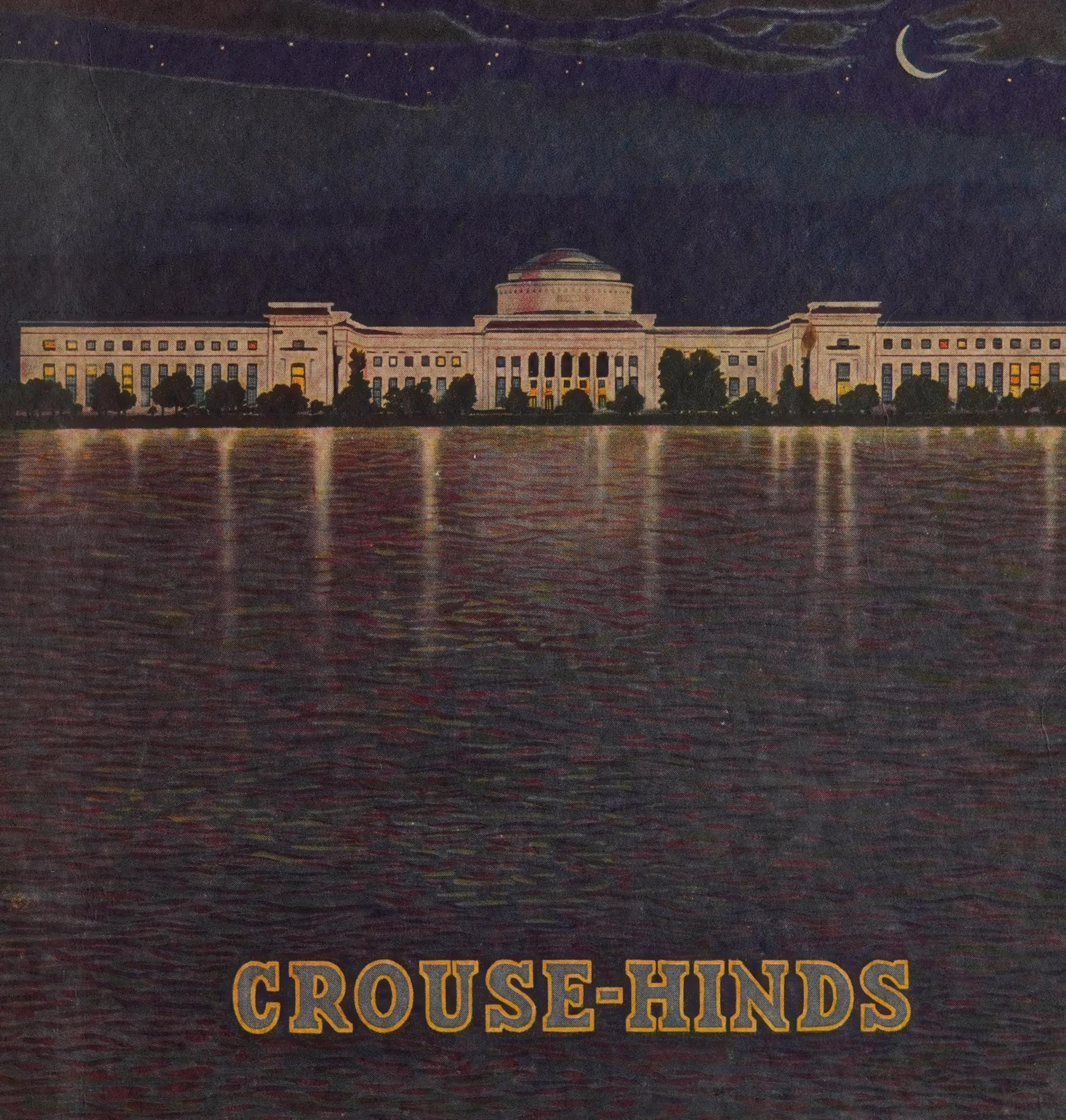
FLOODLIGHTS



CROUSE-HINDS

AVERY
CLASSICS
AT
4100
C884
1935

IMPORTANT NOTICE

This catalog is registered in the name of:—

Name:

Firm Name:

Street:

City:

State:

We would like to keep this catalog up-to-date. Therefore, please notify us immediately of any change in address or ownership.

CROUSE-HINDS COMPANY,
Syracuse, New York.

CROUSE-HINDS

DISCOUNT SHEET

No. FLR-2

(Supersedes Discount Sheet FLR-1)

FLOODLIGHTS—SCHEDULE "F"

Dated and Effective Midnight, June 5, 1935

		Discount Schedule F	Multiplier
Class I	Consumer (All users except those listed under Class II)	33%	.67
Class II	Contractors and Central Stations★	40%	.6

★Note: This discount also applies to Municipal, County, State and Federal Governments; holding companies; steam and electric railroads; oil producing or distributing companies operating 50 or more service stations; tire manufacturers operating their own service stations; schools, colleges, and owners of amateur and professional athletic fields; and all users having their own electrical installation and maintenance departments.

Terms

Note 1. Date of invoice is always date of shipment.

Note 2. Invoices dated from 1st to 15th of the month inclusive are subject to a cash discount of 2% if paid on or before the 25th of that month. Invoices dated from the 16th to the last day of the month inclusive are subject to a cash discount of 2% if paid on or before the 10th of the following month.

Note 3. Invoices not discounted as above are due and payable 30 days after date of invoice with no cash discount allowed.

Delivery

Floodlights are sold f. o. b. cars, Syracuse, New York, with freight prepaid to any regular freight station on a common carrier in the United States.

Express Shipments

Floodlights and floodlight material ordered by express will be forwarded express prepaid. To the net delivered price of the equipment so ordered there will be added a net amount representing the difference between the actual express and actual freight transportation charges.

Note 1: Crouse-Hinds Company will use its own discretion in routing all shipments upon which it assumes transportation charges. Shipments will be made in any manner requested by the customer if the customer will assume the extra transportation costs.

Note 2: No transportation allowance will be made on shipments forwarded collect at the request of the customer.

Returned Goods

Goods returned from any source will not be accepted by the Crouse-Hinds Company unless identified by permission slip number. These permission slips can be obtained only from the Main Office of the Crouse-Hinds Company at Syracuse, New York. If the Crouse-Hinds Company makes an error in filling an order, it will correct such error, or, if necessary, replace the goods, and will do so free of any transportation or cartage charges incurred in the transaction.

Floodlights and Airport Lighting Equipment are made only on special order and are not carried in stock, therefore the Crouse-Hinds Company cannot be responsible for errors by others and will not permit the return of such material. If the purchaser wishes to dispose of Crouse-Hinds Floodlights or Airport Lighting Equipment which he has ordered in error and will so advise, the Crouse-Hinds Company will make a record of such material and will dispose of it for the customer at the first opportunity, allowing credit in an amount equal to that which is received for the material.

Note: Crouse-Hinds Company reserves the right to reject returned goods if on inspection at Syracuse, material is found damaged or obsolete.

List prices and discounts subject to change without notice.

CROUSE-HINDS COMPANY
ESTABLISHED 1897
SYRACUSE, N. Y., U. S. A.

Sales Offices

ATLANTA
BOSTON
CHICAGO
CINCINNATI
CLEVELAND
DALLAS
DETROIT
LOS ANGELES
MILWAUKEE
MINNEAPOLIS
NEW YORK
PHILADELPHIA
PITTSBURGH
SAN FRANCISCO
SEATTLE
ST. LOUIS
WASHINGTON

SCHEDULE "CM"

SERVICE ENTRANCE CAPS, ELBOWS, TEES, END FITTINGS, COUPLINGS, CONNECTORS, AND GROUNDULETS

Effective Midnight, September 22, 1934

TERMS, DELIVERY, AND FREIGHT ALLOWANCE

Terms

Note 11. Invoices dated from 1st to 15th of the month inclusive are subject to a cash discount of 5% if paid on or before the 25th of that month. Invoices dated from the 16th to the last day of the month inclusive are subject to a cash discount of 5% if paid on or before the 10th of the following month.

Delivery

Note 12. Full freight allowed on shipments of $50.00 or more to any regular freight station on a common carrier in the United States. Shipments of less than $50.00 are shipped by freight collect. Express and Parcel Post shipments, f. o. b. shipping point.

Future Delivery

Note 13. Orders not under specific Building Contract must permit shipment within thirty days from date of order or at factory convenience. On shipments deferred by buyer more than thirty days from date of order, the material will be charged at prices current at time of shipment.

Note 14. Fittings under Schedule "CM" may not be assorted with other products for determining discount or transportation allowance.

GENERAL INFORMATION APPLYING TO SCHEDULES "CR", "CE", "R", AND "CM"

Minimum Charge

Note 15. Owing to the cost of handling an order, no invoice will be issued for less than one dollar.

Cartage

Note 16. Crouse-Hinds Company will not assume, allow, or pay any charges for cartage at destination.

Routing

Note 17. Crouse-Hinds Company will use its own discretion in routing all shipments upon which it assumes transportation charges. Shipments will be made in any manner requested by the customer, if the customer will assume the extra transportation costs.

Insurance

Note 18. All shipments routed by water will be covered by marine insurance and the cost thereof charged to customer. If the customer desires water shipment without marine insurance, he must so state on his order and any loss resulting therefrom must be borne by him.

Return of Material

Note 19. The return to Crouse-Hinds Company of material covered by these schedules will not be permitted unless written permission has first been obtained.

Note 20. If permission to return material is granted, the amount of credit to be allowed will be governed by the facts in each case, and the amount of credit to be allowed will be stated on a Permission Slip issued by Crouse-Hinds Company for each return.

Standing Instructions

Note 21. Long experience has proven that blanket instructions filed with Crouse-Hinds Company by its various customers cannot be effectively handled. Therefore, Crouse-Hinds Company cannot accept standing, general, or blanket instructions. Each transaction must be accompanied by full instructions on the order itself.

Sales Taxes

Note 22. The Crouse-Hinds Company reserves the right to add to the sales price of any of its products an amount equivalent to any tax imposed by law.

List prices and discounts subject to change without notice.

CROUSE-HINDS COMPANY

ESTABLISHED 1897

SYRACUSE, N. Y., U. S. A.

Sales Offices

ATLANTA
BOSTON
CHICAGO
CINCINNATI
CLEVELAND
DALLAS
DETROIT
LOS ANGELES
MILWAUKEE
MINNEAPOLIS
NEW YORK
PHILADELPHIA
PITTSBURGH
SAN FRANCISCO
SEATTLE
ST. LOUIS
WASHINGTON

CROUSE-HINDS

FLOODLIGHTS

Catalog 316

October 15, 1936

(Supersedes Previous Listings)

(NOTE: Dimensions in this catalog are not guaranteed. They have been compiled with care, in most cases to the nearest eighth of an inch, and are sufficiently accurate for most purposes. Dimensions are subject to change without notice.)

The illustration on the front cover is of the Massachusetts Institute of Technology

CROUSE-HINDS COMPANY
ESTABLISHED 1897
SYRACUSE, N. Y., U. S. A.

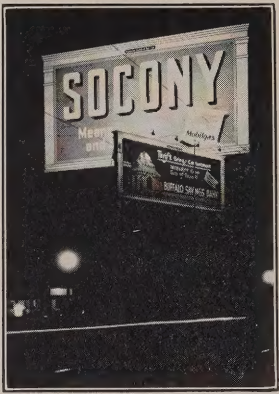
Sales Offices

ATLANTA
BOSTON
CHICAGO
CINCINNATI
CLEVELAND
DALLAS
DETROIT
LOS ANGELES
MILWAUKEE
MINNEAPOLIS
NEW YORK
PHILADELPHIA
PITTSBURGH
SAN FRANCISCO
SEATTLE
ST. LOUIS

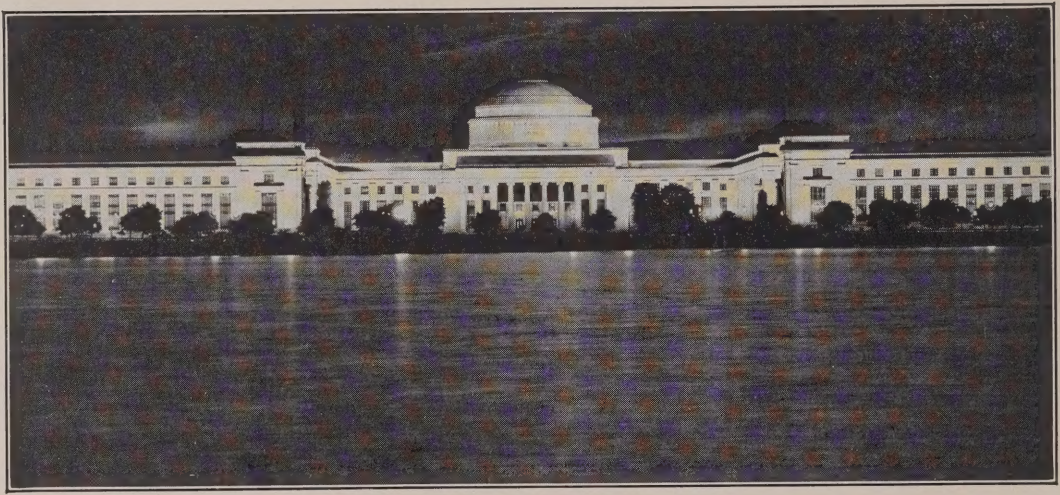
Copyright, 1936, Crouse-Hinds Company, Syracuse, N. Y.

Printed in U.S.A.

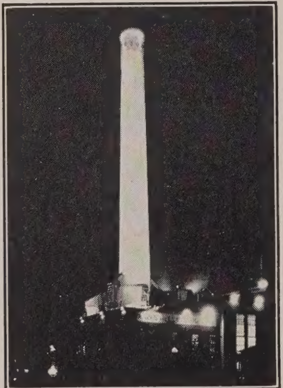
Railroad Yard


SOCONY
BUFFALO SAVINGS BANK

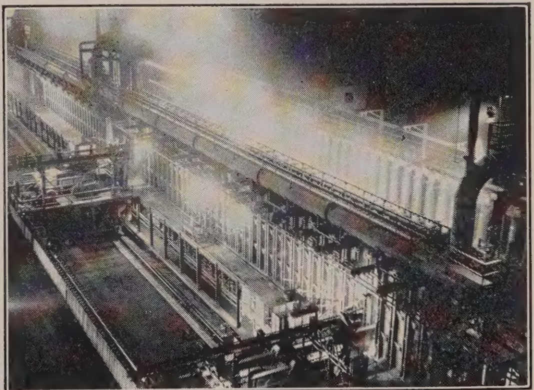
Sign



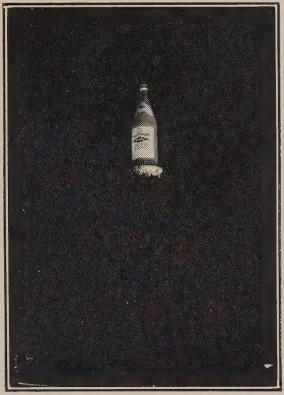
Educational Building



Chimney

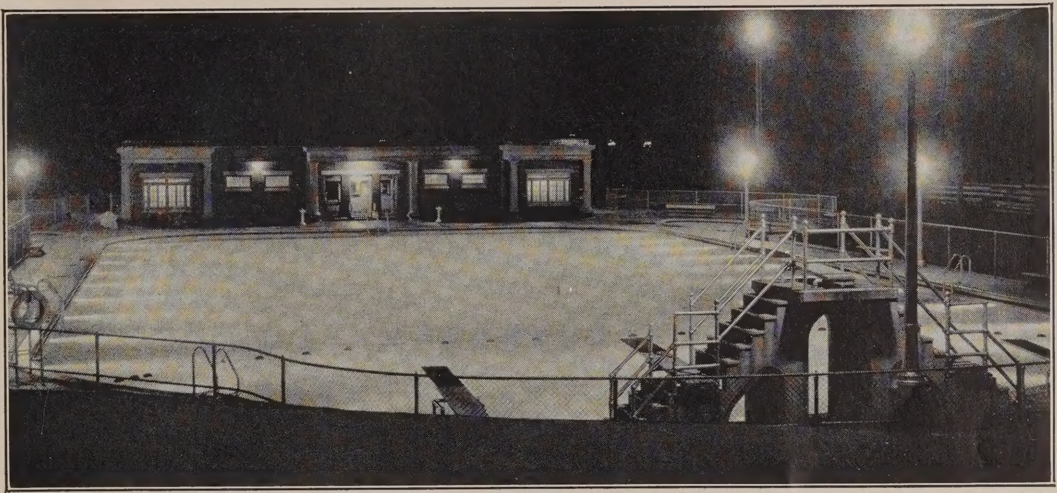


Coke Ovens



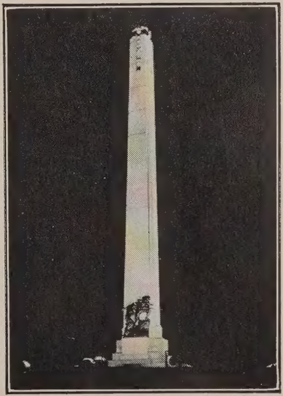
Water Tank

Football Stadium

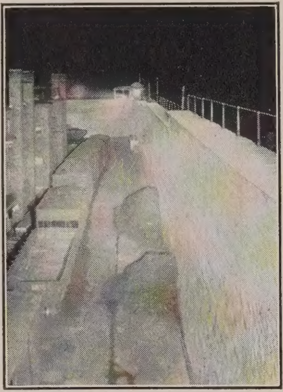


Swimming Pool

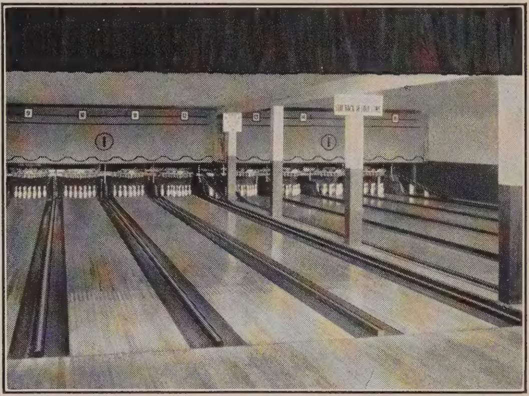
Softball Field



War Memorial



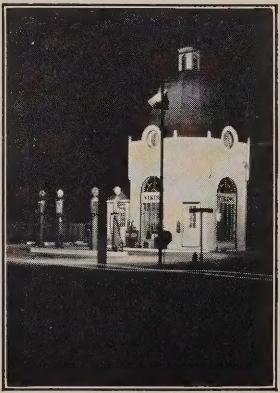
Prison Wall



Bowling Alleys

Baseball Field

Tennis Courts



Gasoline Service Station

Type ADA-12 Floodlights

Medium and Long Range—200 to 250-Watt

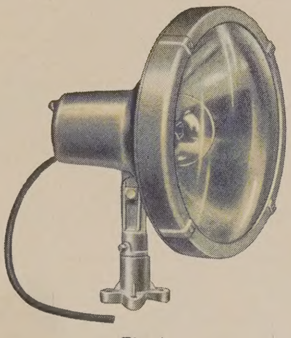


Fig. 1
Type ADA-12

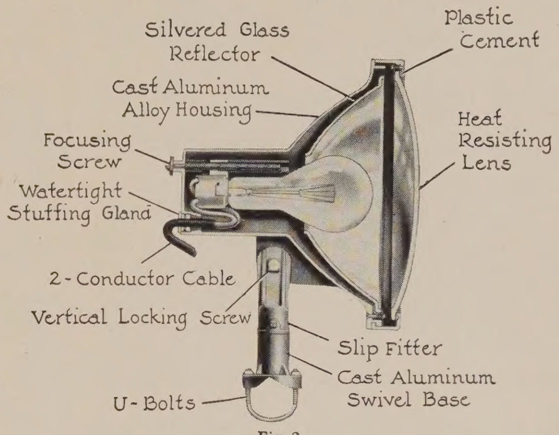


Fig. 2
Type ADA-12—Sectional View

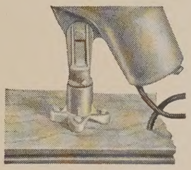


Fig. 3
Horizontal Surface Mounting
For Type ADA-12

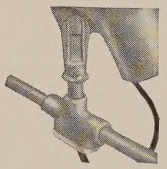


Fig. 4
Pipe Nipple Mounting
For Type ADA-12

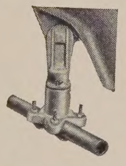


Fig. 5
U-bolt Mounting
For Type ADA-12

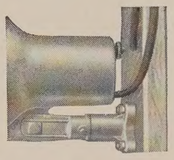


Fig. 6
Vertical Surface Mounting
For Type ADA-12

Type ADA-12 floodlight is a small compact unit adapted to all kinds of floodlighting service. It is universal both in light distribution and in ease of installation. Several methods of mounting are illustrated above and described below.

Fig. 3 shows type ADA-12 floodlight with standard, small, convenient base bolted to a horizontal surface with four ¼-inch bolts.

Fig. 4 shows how type ADA-12 floodlight can be mounted on the conduit connecting a row of floodlights. Type TB Condulet with a 1-wire hole porcelain cover is used, a short nipple being used in the top hub of the Condulet. The bottom casting of the floodlight base is removed; the socket in the upper casting of the swivel support is a slip fitter for ¾-inch pipe.

Fig. 5 shows type ADA-12 floodlight clamped to a pipe by means of the U-bolts which are furnished with each floodlight. These U-bolts will clamp the base to any pipe from ¾ to 1½ inches.

Fig. 6 shows type ADA-12 floodlight bolted to a vertical surface. No extra bracket is required to mount it in this position. It can be fastened to any wall or pole and tilted at any angle desired.

When this floodlight is furnished with narrow beam reflector and used with a 250-watt, G30-bulb Floodlight Service lamp, it becomes a narrow beam spotlight. Where a wider beam is required, the wide beam reflector and 200-watt, PS30-bulb lamp should be used. The spread lens produces an elliptical beam for use in lighting rectangular areas. Colors can be obtained with heat-resisting lenses.

Type	Color of Lens	With Narrow Beam Reflector			With Wide Beam Reflector	
		Polished Alzak	Glass	List, each	Glass	List, each
		Cat. No.	Cat. No.		Cat. No.	
ADA-12	Clear	42727	40823	$34.00	40824	$34.00
	Red	42728	40832	37.00	40833	37.00
	Amber	42729	40841	37.00	40842	37.00
	Green	42730	40850	37.00	40851	37.00
	Purple	42731	40859	37.00	40860	37.00
	Blue	42732	40868	37.00	40869	37.00

Prices do not include incandescent lamps.

Discounts: Schedule "F"

Type ADA-12 Floodlights

Medium and Long Range—200 to 250-Watt

Housing: Cast alumimum alloy, dust-tight, non-ventilated, and weatherproof. It is corrosion-resisting and will not require painting for protective purposes, under normal conditions.

Reflectors: 11½-inch, crystal mirrored glass with hammered surface, when used with the PS-bulb lamp; and smooth surface glass or narrow beam Alzak reflector, when used with the G-bulb lamp. See section 206, page 5.

Mountings: Adjustable, with swivel base. By removing the base casting, a slip fitter is obtained which is designed to fit over a ¾-inch pipe (see Fig. 4, page 1). Two U-bolts are furnished with each floodlight. They will clamp the floodlight to any pipe from ¾ to 1½ inches (see Fig. 5, page 1). A special bolt base for mounting the floodlight with a single ½-inch cap screw can be furnished without extra charge, if specified on the order (Cat. No. HL3526—List Price, $2.50).

Focusing Mechanism: Hand operated from outside of case.

Lamp Receptacle: Porcelain medium screw base (Cat. No. HL8509).

Wiring Connections: The electrical outlet is provided in the rear of the case. A piece of two-conductor cable connected with the lamp receptacle on the inside enters the housing through a watertight stuffing box.

Door Frame: Cast aluminum alloy of same composition as case; clamped to case by a one-eighth turn; provides a dust-tight and weatherproof fit.

Lens: 12-inch diameter, clear Pyrex, or colored, convex, heat-resisting lens in plain, spread, or diffusing styles. See section 206, page 4.

Lamps: 150-watt, PS-25 bulb; 200-watt, PS-30 bulb; or 250-watt, G-30 bulb. (When using the G30-bulb lamp, the floodlight must not be tipped more than 45° below the horizontal.)

Louvers: Circular louvers for eliminating all spill light can be provided (Cat. No. HL2472—List Price, $6.75).

Hood: Sheet aluminum (Cat. No. KL738—List Price, $4.50).

Voltage: The voltage of the lamp should correspond to the voltage of the circuit. Frosted lamps are not suitable for floodlighting and should not be used. The 150 or 200-watt, PS-bulb lamp should be used for short range and the 250-watt, G30-bulb lamp for long range. When ordering the 250-watt lamp, specify for "Floodlight Service." These lamps are also made for "Projection Service," but the projection lamps have a very short life.

Floodlighting from Series Street Lighting Circuits: Where multiple circuits are not available, floodlights can be connected to series street lighting circuits by using small series-multiple transformers.

Packing: Type ADA-12 floodlights are packed in individual cartons.

Finish: Aluminum.

Net Weight: 10¼ lbs. **Shipping Weight:** 14½ lbs.

Light Distribution Data

Reflector	Lens	Lamp			Beam			Beam Spread		Curve No.
		Watts	Bulb	Lumens	Lumens	Efficiency	C.P.	Horizontal	Vertical	
Wide Beam	Plain	200	PS-30	3400	1150	34%	10414	34°	33°	1502
	Spread				1152	34%	7309	47°	34°	1501
	Diffusing				1488	44%	3102	91°	88°	1514
Narrow Beam	Plain	200	PS-30	3400	1261	37%	14710	29°	26°	1512
	Spread				1273	37.4%	10080	45°	27°	....
	Diffusing				1624	48%	3752	86°	85°	1509
Narrow Beam	Plain	250	G-30	3700	1303	35%	97790	12°	11°	1503
	Spread				1384	37½%	30300	31°	12°	1508

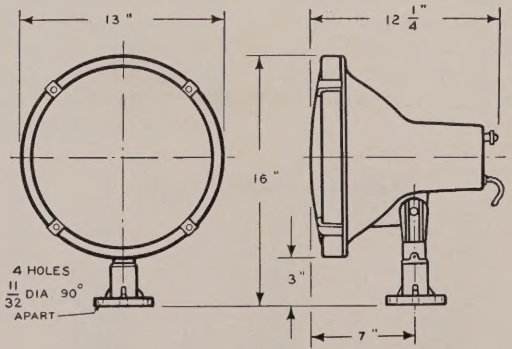


Fig. 7
Dimensions—Type ADA-12

Discounts: Schedule "F"

Type ADE-12 Floodlight Projectors

Medium and Long Range—200 to 250-Watt

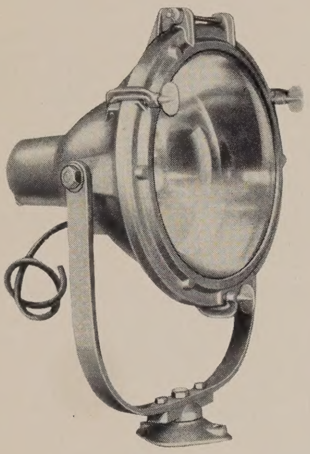


Fig. 1
Type ADE-12
With Standard Mounting

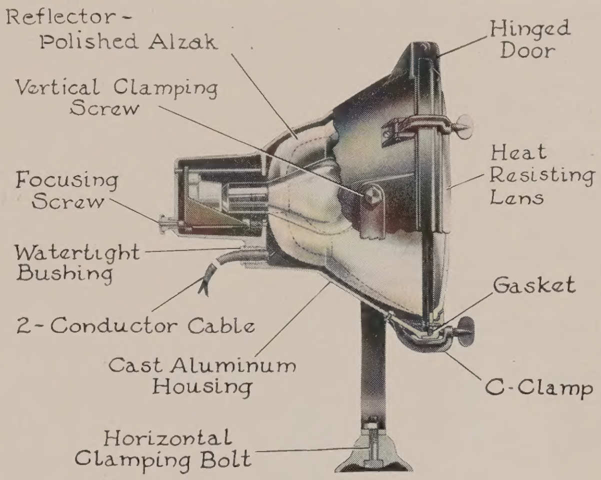

Reflector - Polished Alzak
Hinged Door
Vertical Clamping Screw
Heat Resisting Lens
Focusing Screw
Watertight Bushing
Gasket
2-Conductor Cable
Cast Aluminum Housing
C-Clamp
Horizontal Clamping Bolt

Fig. 2
Type ADE-12
Sectional View●

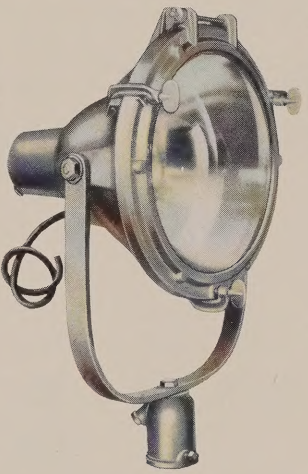


Fig. 3
Type ADE-12
With Slip Fitter

Type ADE-12 floodlight is a ruggedly constructed, efficient, 200-watt projector. Two types of reflectors are listed: a narrow beam and a wide beam. The narrow beam reflector is usually used with the 250-watt, G30-bulb lamp, and the wide beam, with the 200-watt, PS30-bulb lamp. A clear, plain lens is furnished, unless otherwise specified. A clear, diffusing lens and two types of spread lens, 50 and 100°, can be furnished without additional charge, if specified on the order. Color screens can be furnished at $6.00 list, each or the regular lens can be furnished in heat-resisting colored glass at $3.00 list, additional.

Description		Lamp		With Standard Mounting		With Slip Fitter	
		Watts	Bulb	Cat. No.	List, each	Cat. No.	List, each
ADE-12	With Wide Beam Polished Alzak Reflector	200	PS-30	42428	$34.00	42430	$34.00
	With Narrow Beam Polished Alzak Reflector	200	PS-30	42874	34.00	42875	34.00
	With Narrow Beam Polished Alzak Reflector	250	G-30	42429	34.00	42431	34.00

Prices do not include incandescent lamps.
●Denotes change in illustration.

Type ADE-12 Floodlight Projectors

Medium and Long Range—200 to 250-Watt

Housing: Cast aluminum alloy, dust-tight, and weatherproof. It is corrosion-resisting and will not require painting for protective purposes, under normal conditions.

Reflectors: 12-inch, polished Alzak—wide beam, when used with PS-bulb lamp; or narrow beam, when used with G-bulb lamp. See section 206, page 5.

Mountings: Steel trunnion arm, hot-dipped galvanized with cast aluminum base. A slip fitter for 1½-inch pipe can be furnished. When the floodlight is to be mounted on a wood cross arm or on steel framework, regular base is removed and the floodlight can be bolted to the surface with a single ⅝-inch bolt. See section 207, page 2.

Focusing Mechanism: Hand operated from outside of case.

Lamp Receptacle: Medium screw base (Cat. No. HL6019).

Wiring Connections: The electrical outlet is provided in the rear of the case. A piece of two-conductor cable connected to the lamp receptacle on the inside enters the housing through a watertight stuffing box.

Door Frame: Cast aluminum alloy, hinged to case and clamped to the housing by three "C" clamps.

Lens: 12-inch diameter, clear, Pyrex, heat-resisting glass. Clear, spread 50 or 100°, or diffusing, heat-resisting lenses can be furnished without additional charge, if specified on the order. Color screens or heat-resisting colored lenses can be furnished. See section 206, page 4.

Lamps: 200-watt, PS30-bulb, General Lighting Service lamps; or 250-watt, G30-bulb Floodlight Service lamps.

Louvers: Circular louvers for eliminating all spill light can be provided (Cat. No. KL661—List Price, $6.75).

Hood: Cast aluminum (Cat. No. KL607—List Price, $4.50). See section 206, page 5.

Finish: Aluminum.

Net Weight: 18½ lbs.

Shipping Weight: 30 lbs.

Light Distribution Data

Reflector	Lens	Lamp			Beam			Beam Spread	
		Watts	Bulb	Lumens	Lumens	Efficiency	C.P.	Horizontal	Vertical
Wide Beam	Plain	200	PS-30	3400	1370	40.3%	7600	48°	47.5°
	50° Spread				1610	47%	5680	64°	46.0°
	Diffusing				1680	49.4%	3200	88°	86.0°
Narrow Beam	Plain	250	G-30	3700	1410	38.0%	106000	12.5°	12.0°
	50° Spread				1550	41.8%	31800●	31.0°	14.4°

●Denotes change in candlepower.

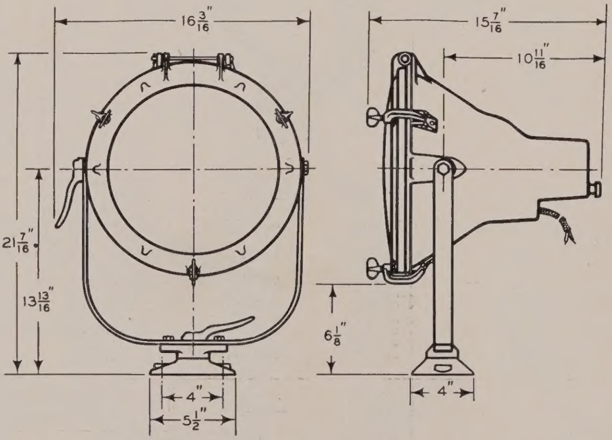


Fig. 4
Dimensions—Type ADE-12

Discounts: Schedule "F"

Types ADR-12 and ADR-14 Floodlight Projectors

12-Inch, 200 to 250-Watt | Portable | 14-Inch, 500-Watt

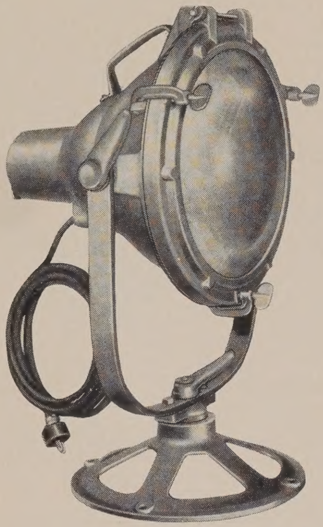


Fig. 1
Type ADR-12

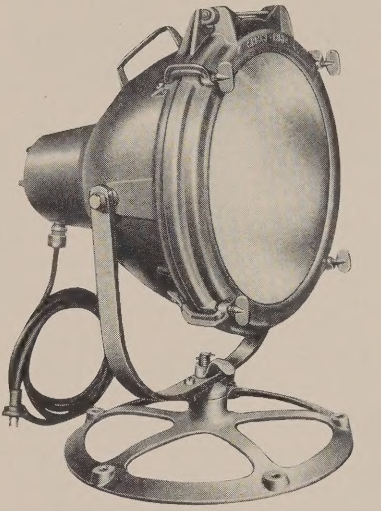


Fig. 2
Type ADR-14

Types ADR-12 and ADR-14 floodlights are rugged units especially adaptable for portable use, either when a narrow beam spotlight or a wide evenly distributed beam of light is required. They are supplied with a convenient carrying handle and a wheel base, so that the floodlights will stand without tipping. Suggestions for the use of these and other floodlights for fire fighting and emergency truck use will be found on pages 17 and 18 of this section.

Description		Lens	Lamp		Cat. No.	List, each
			Watts	Bulb		
ADR-12	With Narrow Beam Polished Alzak Reflector	Plain	200	PS-30	42950	$41.00
	With Narrow Beam Polished Alzak Reflector	Plain	250	G-30●	42023A	41.00
	With Wide Beam Polished Alzak Reflector .	Diffusing	200	PS-30	42024A	41.00
ADR-14	With Narrow Beam Polished Alzak Reflector	Plain	500	PS-40	42951	$63.00
	With Narrow Beam Polished Alzak Reflector	Plain	500	G-40	42783A	63.00
	With Wide Beam Polished Alzak Reflector .	Diffusing	500	PS-40	42784A	63.00

Prices do not include incandescent lamps.
●Denotes change in information.

Discounts: Schedule "F"

Types ADR-12 and ADR-14 Floodlight Projectors

12-Inch, 200 to 250-Watt   Portable   14-Inch, 500-Watt

Housing: Cast aluminum alloy, dust-tight, non-ventilated, and weatherproof. It is corrosion-resisting and will not require painting for protective purposes, under normal conditions.

Reflectors: ADR-12, 12-inch; ADR-14, 14-inch diameters, polished Alzak—wide beam, when used with PS-bulb lamp; or narrow beam, when used with G-bulb lamp. See section 206, page 5.

Mounting: Trunnion, with wheel base of cast aluminum alloy. A handle is provided to lock the horizontal and vertical adjustments.

Focusing Mechanism: Hand operated from outside of case.

Lamp Receptacles: ADR-12—Porcelain medium screw base (Cat. No. HL6019). An adapter can be furnished for use with 21, 32, or 50-candlepower, 6 or 12-volt bayonet base single contact lamps (Cat. No. HL3076—List Price, $1.85).
ADR-14—Mogul screw base (Cat. No. HL2128).

Wiring Connections: 10 feet of heavy duty, rubber-covered cable is furnished with a medium screw plug. A watertight stuffing box is provided in the rear of the housing.

Door Frame: Cast aluminum alloy, hinged at top and clamped to case by "C" clamps. Provides a dust-tight and weatherproof fit.

Lens: Clear Pyrex, convex, heat-resisting lens in plain, spread, or diffusing styles. See section 206, page 4.

Lamps: ADR-12—150-watt, PS-25 bulb; 200-watt, PS-30 bulb; or 250-watt, G-30 bulb, 110-volt. 6 or 12-volt bayonet base lamps can be used with the adapter listed under "Lamp Receptacles" in the opposite column.
ADR-14—500-watt, PS-40 bulb; or 500-watt, G-40 bulb, 110-volt.

Louvers: Circular louvers for eliminating all spill light can be provided (Cat. Nos.—ADR-12, HL2472—List Price, $6.75; ADR-14, HL3261—List Price, $10.00).

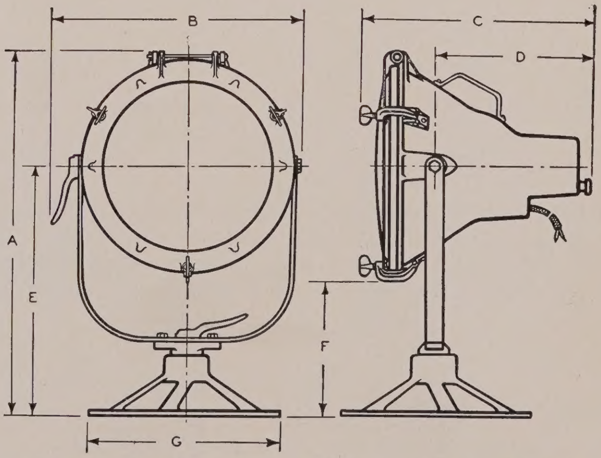
Finish: Natural aluminum.

Net Weights: ADR-12, 22¼ lbs. ADR-14, 36 lbs.

Shipping Weights: ADR-12, 35 lbs. ADR-14, 50 lbs.

Light Distribution Data

Type	Reflector	Lens	Lamp			Beam			Beam Spread	
			Watts	Bulb	Lumens	Lumens	Efficiency	C.P.	Horizontal	Vertical
ADR-12	Narrow Beam Wide Beam	Plain Diffusing	250 200	G-30 PS-30	3700 3400	1410 1680	38.0% 49.4%	106000 3200	12.5° 88.0°	12.0° 86.0°
ADR-14	Narrow Beam Wide Beam	Plain Diffusing	500 500	G-40 PS-40	8650 9800	3500 4800	42% 49%	200000 10000	14° 72°	14½° 71°



Type	A	B	C	D	E	F	G
ADR-12	$23\frac{11}{16}$	$16\frac{3}{16}$	$15\frac{7}{16}$	$10\frac{11}{16}$	$16\frac{1}{16}$	8⅜	12
ADR-14	$25\frac{5}{16}$	$17\frac{1}{16}$	17⅝	$11\frac{5}{16}$	16⅜	7⅜	16½

Fig. 3
Dimensions—Types ADR-12 and ADR-14

Discounts: Schedule "F"

Type ADE-14 Floodlight Projectors

Medium and Long Range—500-Watt

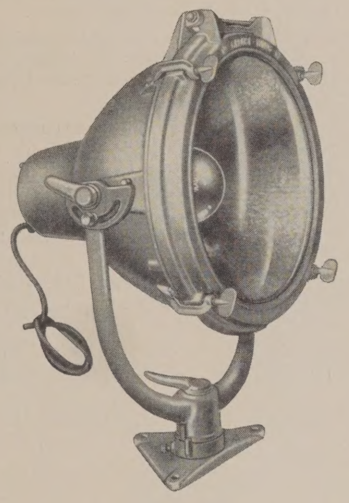


Fig. 1
Type ADE-14
With Standard Mounting

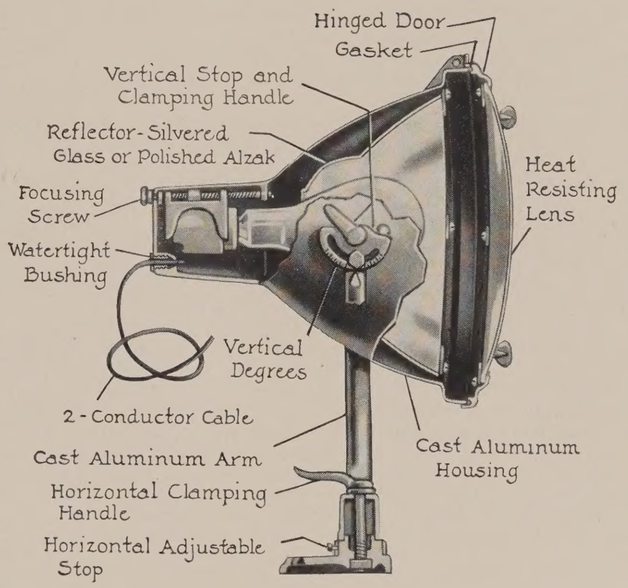

Hinged Door
Gasket
Vertical Stop and Clamping Handle
Reflector-Silvered Glass or Polished Alzak
Heat Resisting Lens
Focusing Screw
Watertight Bushing
Vertical Degrees
2-Conductor Cable
Cast Aluminum Arm
Cast Aluminum Housing
Horizontal Clamping Handle
Horizontal Adjustable Stop

Fig. 2
Type ADE-14
Sectional View

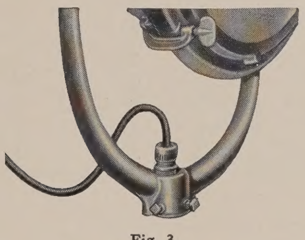


Fig. 3
Slip-Fitter Mounting
For Type ADE-14

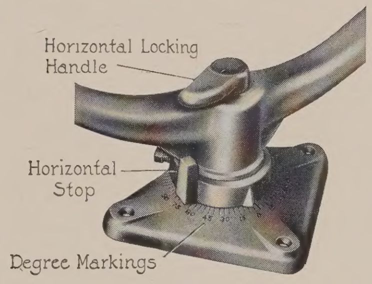

Horizontal Locking Handle
Horizontal Stop
Degree Markings

Fig. 4
Standard Mounting
Showing Detail of Horizontal
Stop and Degree Markings
For Horizontal Adjustment

Type ADE-14 floodlights are very compact and efficient, 500-watt projectors. The reflector is designed to intercept and direct into the beam, the maximum amount of the light of the lamp. A clear, plain lens is regularly furnished with these projectors, but a clear 40 or 100°, spread lens (producing an elliptical beam of light), or a clear, diffusing lens can be furnished without additional charge, if specified on the order. Color screens can also be furnished.

Description		Lamp		With Standard Mounting		With Slip Fitter	
		Watts	Bulb	Cat. No.	List, each	Cat. No.	List, each
ADE-14	With Wide Beam Glass Reflector	500	PS-40	41214A	$60.00	42751	$60.00
	With Narrow Beam Glass Reflector	500	PS-40	42923	60.00	42920	60.00
	With Narrow Beam Glass Reflector	500	G-40	41215A	60.00	42752	60.00
	With Wide Beam Polished Alzak Reflector .	500	PS-40	42740	$60.00	42753	$60.00
	With Narrow Beam Polished Alzak Reflector	500	PS-40	42739	60.00	42754	60.00
	With Narrow Beam Polished Alzak Reflector	500	G-40	42921	60.00	42922	60.00

Prices do not include incandescent lamps.

Discounts: Schedule "F"

Type ADE-14 Floodlight Projectors

Medium and Long Range—500-Watt

Housing: Cast aluminum alloy, dust-tight, and weatherproof. It is corrosion-resisting and will not require painting for protective purposes, under normal conditions.

Reflectors: 14-inch, crystal mirrored glass or polished Alzak—wide beam, when used with PS-bulb lamp; or narrow beam, when used with G-bulb lamp. See section 206, page 5.

Mountings: Aluminum alloy, trunnion. Standard mounting is adjustable with swivel base, corrosion-resisting. Both horizontal and vertical adjustable stops are provided. The floodlight can be turned around or tipped over for convenience in relamping and cleaning, and returned to its exact original setting.

Slip Fitter—Standard mounting base is removed and a CGB295A connector is furnished in the top of the slip fitter for wiring convenience. Special bases and brackets can be furnished. See section 206, pages 1 and 2.

The standard mounting is furnished with set screws in the slip fitter and can easily be converted to the slip-fitter mounting by removing the base and inserting a CGB295A connector—List Price, $1.00—in the top of the slip fitter, which is tapped for it.

Degree Markings: The horizontal and vertical adjustments are provided with a scale marked in degrees. The proper setting can be determined beforehand for many installations, and the floodlights set at the right angles by the contractor installing the floodlights. This eliminates a great deal of nighttime adjustments and saves overtime work.

Focusing Mechanism: Hand operated from outside of case.

Lamp Receptacles: Mogul screw base (Cat Nos. HL2128 for PS-bulb lamp; HL8751 for G-bulb lamp).

Wiring Connections: The electrical outlet is provided in the rear of the case. A piece of two-conductor cable connected to the lamp receptacle on the inside enters the housing through a watertight stuffing box.

Door Frame: Cast aluminum alloy, hinged to case and clamped to the housing by four "C" clamps.

Lens: 14-inch diameter, clear, plain, Pyrex, heat-resisting glass. Clear, spread, or diffusing, convex, heat-resisting lenses can be furnished without additional charge, if specified on the order. Color screens can also be furnished. See section 206, page 4.

Lamps: 500-watt, PS40-bulb or 300-watt, PS35-bulb General Lighting Service lamps; or 500-watt, G40-bulb Floodlight Service lamps.

Louvers: Circular louvers for eliminating all spill light can be provided (Cat. No. HL3261—List Price, $10.00).

Hood: Sheet aluminum (Cat. No. HL3399—List Price, $7.00).

Finish: Aluminum.

Net Weight: 34 lbs.

Shipping Weight: 48 lbs.

Light Distribution Data

Reflector	Lens	Lamp			Beam			Beam Spread		Curve No.
		Watts	Bulb	Lumens	Lumens	Efficiency	C.P.	Horizontal	Vertical	
Wide Beam	Plain	500	PS-40	9800	4107	42%	33040	37½°	36°	....
	Spread				4834	49%	27590	51°	36½°	....
	Diffusing				5064	51½%	10890	72°	71°	....
Narrow Beam	Plain	500	PS-40	9800	4796	48½%	56900	30½°	28½°	1515
	Spread				4950	50%	38890	46°	26°	....
	Diffusing				5680	57½%	14270	69½°	66½°	....
Narrow Beam	Plain	500	G-40	8650	3542	41%	221000	13°	13½°	....
	Spread				3950	45½%	66283	35°	16½°	....

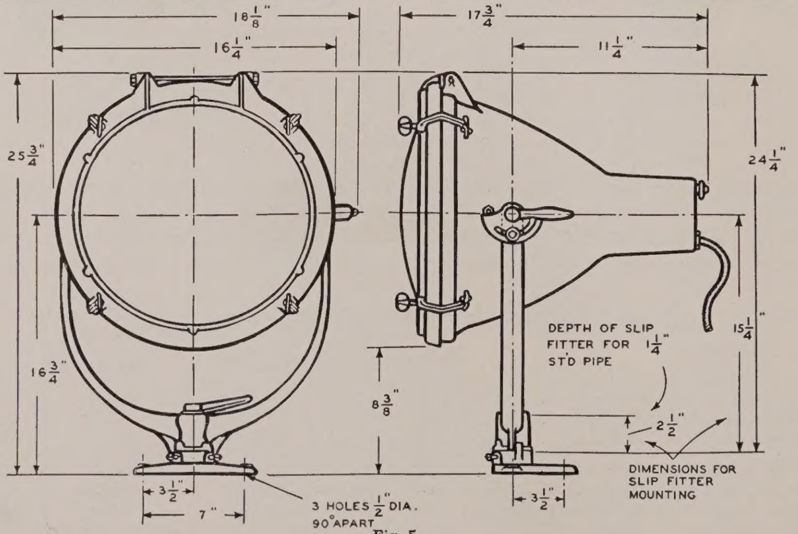

18 1/8"
16 1/4"
17 3/4"
11 1/4"
25 3/4"
24 1/4"
16 3/4"
15 1/4"
8 3/8"
DEPTH OF SLIP FITTER FOR 1 1/4" STD PIPE
2 1/2"
DIMENSIONS FOR SLIP FITTER MOUNTING
3 1/2"
7"
3 HOLES 1/2" DIA. 90° APART
3 1/2"

Fig. 5
Dimensions—Type ADE-14

Discounts: Schedule "F"

Type ADE-16 Floodlight Projectors

Medium and Long Range—1000-Watt

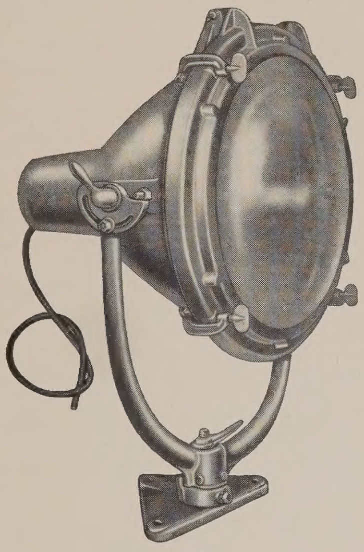


Fig. 1
Type ADE-16
With Standard Mounting

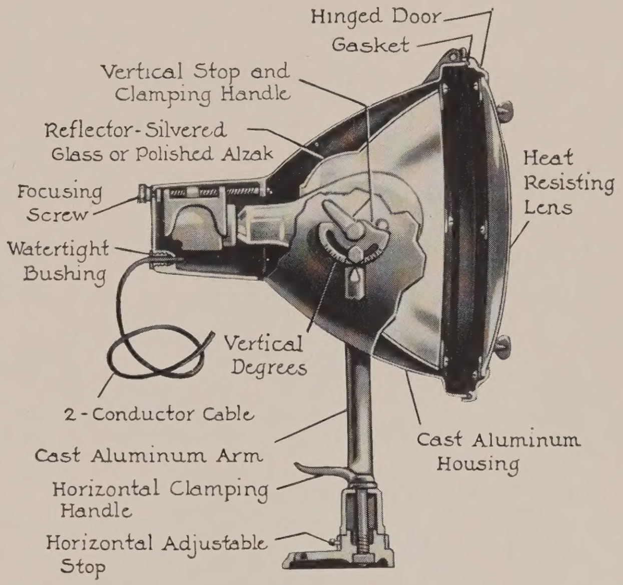

Hinged Door
Gasket
Vertical Stop and Clamping Handle
Reflector-Silvered Glass or Polished Alzak
Heat Resisting Lens
Focusing Screw
Watertight Bushing
Vertical Degrees
2-Conductor Cable
Cast Aluminum Arm
Cast Aluminum Housing
Horizontal Clamping Handle
Horizontal Adjustable Stop

Fig. 2
Type ADE-16
Sectional View

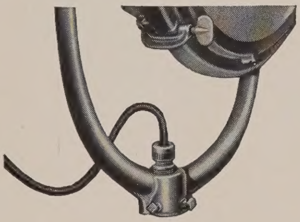


Fig. 3
Slip-Fitter Mounting
For Type ADE-16

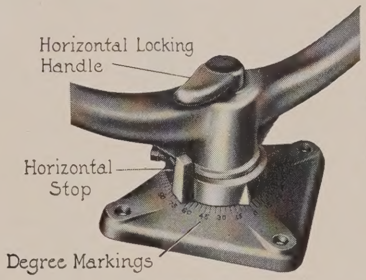

Horizontal Locking Handle
Horizontal Stop
Degree Markings

Fig. 4
Standard Mounting
Showing Detail of Horizontal
Stop and Degree Markings
For Horizontal Adjustment

Type ADE-16 floodlight projector is a universal 1000-watt unit of sturdy construction and high efficiency. The unit is dust-tight and weatherproof, and is constructed entirely of corrosion-resisting metal. Several combinations of lenses, reflectors, and lamps are available so that the beam of the projector may be varied from a narrow beam to a wide beam. The unit can be provided with various types of mountings so that the proper base may be selected for each particular installation. See section 207, pages 1 to 3, for typical installations.

Description		Lamp		With Standard Mounting		With Slip Fitter	
		Watts	Bulb	Cat. No.	List, each	Cat. No.	List, each
ADE-16	With Wide Beam Glass Reflector	300 to 1000	PS-52	41056A	$85.00	41291A	$85.00
	With Narrow Beam Glass Reflector	500 or 1000	G-40	41058A	85.00	41293A	85.00
	With Wide Beam Polished Alzak Reflector	300 to 1000	PS-52	42741	$85.00	42742	$85.00
	With Narrow Beam Polished Alzak Reflector	500 or 1000	G-40	42743	85.00	42744	85.00
	With Narrow Beam Polished Alzak Reflector	300 to 1000	PS-52	42932	85.00	42933	85.00

Prices do not include incandescent lamps.

Discounts: Schedule "F"

Type ADE-16 Floodlight Projectors

Medium and Long Range—1000-Watt

Housing: Cast aluminum alloy, dust-tight, and weatherproof. It is corrosion-resisting and will not require painting for protective purposes, under normal conditions.

Reflectors: 16-inch, crystal mirrored glass or polished Alzak—wide beam, when used with PS-bulb lamp; and narrow beam, when used with G-bulb lamp. See section 206, page 5.

Mountings: Aluminum alloy, trunnion. Standard mounting is adjustable with swivel base, corrosion-resisting. Both horizontal and vertical adjustable stops are provided. The floodlight can be turned around or tipped over for convenience in relamping and cleaning, and returned to its exact original setting.

Slip Fitter—Standard mounting base is removed and a CGB295A connector is furnished in the top of the slip fitter for wiring convenience. Special bases and brackets can be furnished. See section 206, pages 1 and 2.

The standard mounting is furnished with set screws in the slip fitter and can easily be converted to the slip-fitter mounting by removing the base and inserting a CGB295A connector—List Price, $1.00—in the top of the slip fitter, which is tapped for it.

Degree Markings: The horizontal and vertical adjustments are provided with a scale marked in degrees. The proper setting can be determined beforehand for many installations, and the floodlights set at the right angles by the contractor installing the floodlights. This eliminates a great deal of nighttime adjustments and saves overtime work.

Focusing Mechanism: Hand operated from outside of case.

Lamp Receptacles: Porcelain Mogul screw base (Cat. Nos. HL2128 for PS-bulb lamp; HL8751 for G-bulb lamp).

Wiring Connections: A three-foot lead of asbestos and rubber-insulated cable is furnished. It enters the housing through a watertight stuffing box.

Door Frame: Cast aluminum alloy, hinged at top and clamped to the housing by four "C" clamps. A gasket is provided between the door and the housing.

Lens: 16$\frac{7}{16}$-inch diameter, clear, plain, Pyrex, convex, heat-resisting. Clear, spread, or diffusing, convex, heat-resisting lens can be furnished without additional charge, if specified on the order. Color screens can be furnished. See section 206, page 4.

Lamps: 300 to 1000-watt, PS-bulb; 500 or 1000-watt, G-40 bulb. **Note: When used with a color screen, the largest lamp that can be used is 750 watts.**

Louvers: Circular louvers for eliminating all spill light can be provided (Cat. No. KL627—List Price, $10.00).

Hood: Sheet aluminum (Cat. No. HL3214—List Price, $7.00).

Packing: Type ADE-16 projectors are packed in individual cartons.

Finish: Natural aluminum.

Net Weight: 42 lbs.

Shipping Weight: 60 lbs.

Light Distribution Data

Reflector	Lens	Lamp			Beam			Beam Spread		Curve No.
		Watts	Bulb	Lumens	Lumens	Efficiency	C.P.	Horizontal	Vertical	
Wide Beam	Plain	1000	PS-52	20700	10780	52%	69550	41.5°	38°	2000
	Spread				9600	46.5%	33050	65°	52°	2001
	Diffusing				10020	48.5%	19120	81°	79°	2002
Narrow Beam	Plain	1000	G-40	19300	6120	32%	434200	12.8°	11.2°	2003
	Spread				7720	40%	154600	34.5°	14.5°	....

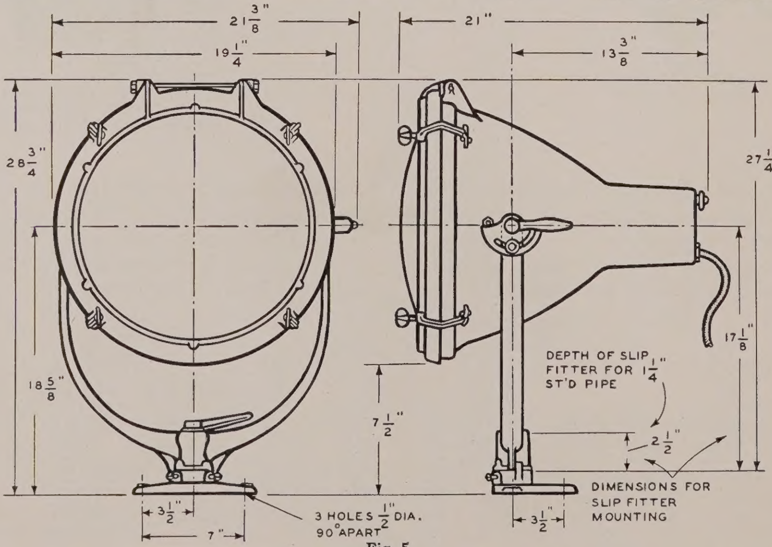

21 3/8"
19 1/4"
28 3/4"
18 5/8"
3 1/2"
7"
3 HOLES 1/2" DIA. 90° APART
21"
13 3/8"
27 1/4"
17 1/8"
7 1/2"
DEPTH OF SLIP FITTER FOR 1 1/4" ST'D PIPE
2 1/2"
DIMENSIONS FOR SLIP FITTER MOUNTING
3 1/2"

Fig. 5
Dimensions—Type ADE-16

Discounts: Schedule "F"

Type LCE-1120 Floodlight Projectors

Medium and Long Range—1500-Watt

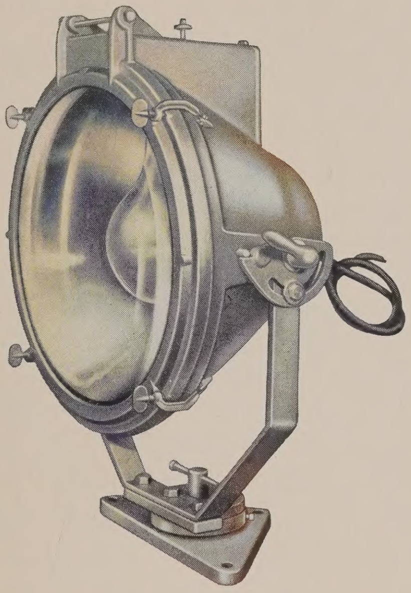


Fig. 1
Type LCE-1120

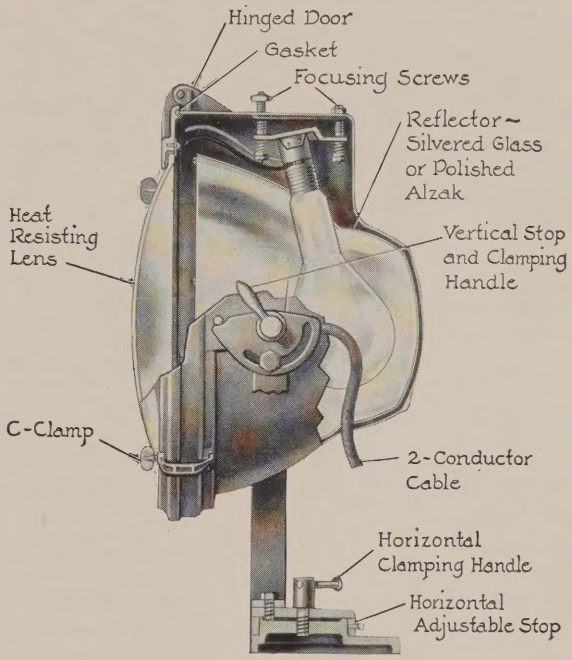

Hinged Door
Gasket
Focusing Screws
Reflector – Silvered Glass or Polished Alzak
Heat Resisting Lens
Vertical Stop and Clamping Handle
C-Clamp
2-Conductor Cable
Horizontal Clamping Handle
Horizontal Adjustable Stop

Fig. 2
Type LCE-1120—Sectional View

Type LCE-1120 floodlight projector is a unit of very high efficiency designed for use with 1500-watt lamps. For the illumination of large areas, the use of this projector greatly reduces the installation cost, lighting load, and maintenance cost. The unit can be arranged with plain, spread, or diffusing lens. The 750, 1000, or 1500-watt, PS52-bulb lamp; or the 1000 or 1500-watt, G-bulb lamp, may be used as required. **When used with the G-bulb lamp, the housing is tipped over so that the lamp operates in a base-down position.**

Description		Lamp		Cat. No.	List, each
		Watts	Bulb		
LCE-1120	With Wide Beam Glass Reflector	750 to 1500	PS-52	41550	$140.00
	With Narrow Beam Glass Reflector	1000 or 1500	G	41549	140.00
	With Wide Beam Polished Alzak Reflector .	750 to 1500	PS-52	42745	$140.00
	With Narrow Beam Polished Alzak Reflector	1000 or 1500	G	42746	140.00

Prices do not include incandescent lamps.

Type LCE-1120 Floodlight Projectors

Medium and Long Range—1500-Watt

Housing: Cast aluminum alloy, dust-tight, non-ventilated, and weatherproof.

Reflectors: 20-inch, crystal mirrored glass or polished Alzak, narrow or wide beam. The wide beam reflector is recommended for everything except very long range projection. See section 206, page 5.

Mountings: Steel trunnion on cast Feraloy base. Both horizontal and vertical adjustable stops are provided. The floodlight can be turned around or tipped over for convenience in relamping and cleaning, and returned to its exact original setting.

Special bases and brackets for various mounting conditions can be furnished. See section 206, pages 1 and 2.

Focusing Mechanism: Three-way, operated from the outside of the case.

Lamp Receptacle: Mogul screw base (Cat. No. HL7012).

Wiring Connections: A three-foot lead of two-conductor, rubber-covered cable is furnished. The cable enters the housing through a watertight stuffing box. The individual wires are covered with a slow burning insulation. The heavy rubber jacket is removed from the portion of the wire extending inside the case.

Door Frame: Cast aluminum alloy, hinged at top for PS-bulb lamps; at bottom for G-bulb lamps, and clamped to the housing by four "C" clamps.

Lens: 20-inch diameter, clear, plain, convex, heat-resisting Pyrex (Cat. No. HL9016). Clear, spread, or diffusing, convex, heat-resisting lens can be furnished without additional charge, if specified on the order. See section 206, page 4.

Lamps: 750, 1000, or 1500-watt, PS-52 bulb; 1000 or 1500-watt, G-bulb.

Louvers: Circular louvers for eliminating all spill light can be provided (Cat. No. HL3328—List Price, $17.00).

Hood: Sheet aluminum (Cat. No. HL3396—List Price, $10.00).

Finish: Case, natural aluminum; base and trunnion, galvanized.

Net Weight: 76 lbs.

Shipping Weight: 115 lbs.

Light Distribution Data

Reflector	Lens	Lamp			Beam			Beam Spread		Curve No.
		Watts	Bulb	Lumens	Lumens	Efficiency	C.P.	Horizontal	Vertical	
Wide Beam	Plain Spread Diffusing	1500	PS-52	33000	18710 19640 20490	56½% 59½% 62%	139300 104300 34890	42° 61° 80°	34° 34½° 78½°	2004 2005 2006
Narrow Beam	Plain Spread	1500	PS-52	33000	14700 17040	44½% 51½%	484400 227600	18.9° 38°	16½° 17.2°	2007 2008
Narrow Beam	Plain Spread	1500	G-48	28400	11540 13440	40½% 47½%	688400 240500	14.4° 35½°	12½° 14°	2009 2010

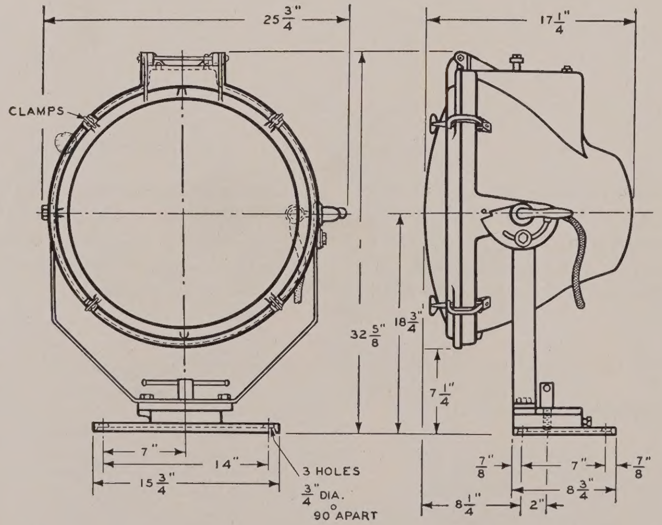


Fig. 3
Dimensions—Type LCE-1120

Type LCE-1020 Floodlight Projectors

Medium and Long Range—1500-Watt

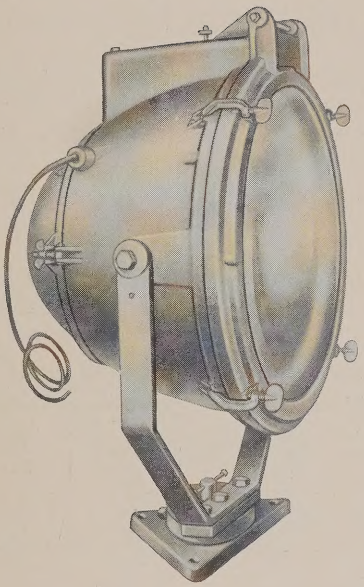


Fig. 1
Type LCE-1020

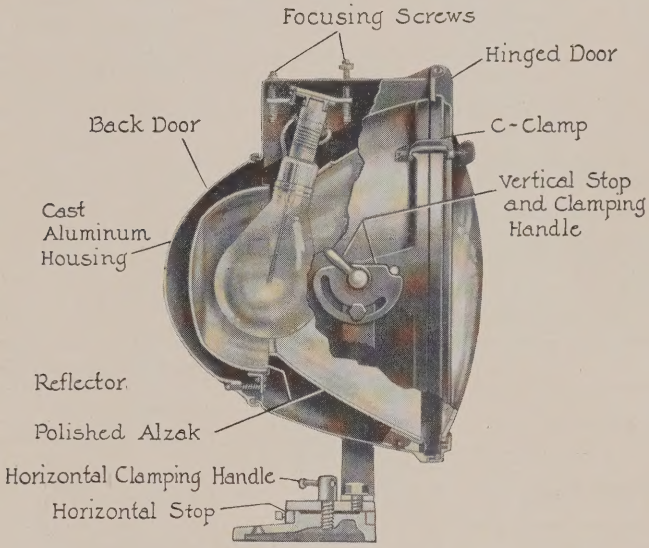

Focusing Screws
Hinged Door
Back Door
C-Clamp
Vertical Stop and Clamping Handle
Cast Aluminum Housing
Reflector
Polished Alzak
Horizontal Clamping Handle
Horizontal Stop

Fig. 2
Type LCE-1020—Sectional View

Type LCE-1020 floodlight projector is a unit of very high efficiency for use with 1500-watt lamps. It has both a front and a rear door, and can be relamped from the rear. For the illumination of large areas, the use of this projector greatly reduces the installation cost, lighting load, and maintenance cost.

Type LCE-1020 can be supplied with plain, spread, or diffusing lens. The 750, 1000, or 1500-watt, PS52-bulb lamp; or the 1000 or 1500-watt, G-bulb lamp, may be used as required. **When the floodlights are ordered for G-bulb lamps, the housing is reversed so that the lamp receptacle is at the bottom.**

Description		Lamp		Cat. No.	List, each
		Watts	Bulb		
LCE-1020	With Narrow Beam Polished Alzak Reflector	750 to 1500	PS-52	42778	$175.00
	With Narrow Beam Polished Alzak Reflector	1000 or 1500	G	42779	175.00

Prices do not include incandescent lamps.

Discounts: Schedule "F"

Type LCE-1020 Floodlight Projectors

Medium and Long Range—1500-Watt

Housing: Cast aluminum alloy, dust-tight, non-ventilated, and weatherproof, with rear door for relamping.

Reflector: Polished Alzak—front section, 20 inches in diameter; rear section, 11½ inches in diameter. See section 206, page 5.

Mountings: Steel trunnion on cast Feraloy base. Both horizontal and vertical adjustable stops are provided. The floodlight can be turned around or tipped over for convenience in relamping and cleaning, and returned to its exact original setting.

Special bases and brackets for various mounting conditions can be furnished. See section 206, pages 1 and 2.

Focusing Mechanism: Three-way, operated from the outside of the case.

Lamp Receptacles: Mogul screw base (Cat. Nos. HL7012 for PS-bulb lamp; HL8751 for G-bulb lamp).

Wiring Connections: A three-foot lead of two-conductor, rubber-covered cable is furnished. The cable enters the housing through a watertight stuffing box. The individual wires are covered with a slow-burning insulation. The heavy rubber jacket is removed from the portion of the wire extending inside the case.

Door Frames: Cast aluminum alloy, with front door hinged at top, and back door hinged at side.

Door Catches: Four "C" clamps for front door; and one swivel bolt for rear door.

Lens: 20-inch, clear, plain, convex, heat-resisting Pyrex (Cat. No. HL9016). Clear, spread, or diffusing, convex, heat-resisting lens can be furnished without additional charge, if specified on the order. See section 206, page 4.

Lamps: 750, 1000, or 1500-watt, PS-52 bulb; 1000 or 1500-watt, G bulb.

Louvers: Circular louvers for eliminating all spill light can be provided (Cat. No. HL3328—List Price, $17.00).

Hood: Sheet aluminum (Cat. No. HL3396—List Price, $10.00).

Finish: Case, natural aluminum; base and trunnion, galvanized.

Net Weight: 80 lbs.

Shipping Weight: 120 lbs.

Light Distribution Data

Reflector	Lens	Lamp			Beam			Beam Spread	
		Watts	Bulb	Lumens	Lumens	Efficiency	C.P.	Horizontal	Vertical
Narrow Beam	Plain Spread Diffusing	1500	PS-52	33000	14380 15070 17160	43.6% 45.6% 52%	384240 164400 42780	21° 41° 64°	19° 21° 63°
Narrow Beam	Plain Spread	1500	G-48	28400	12220 13280	43% 46.5%	716230 221300	14° 35½°	12½° 14°

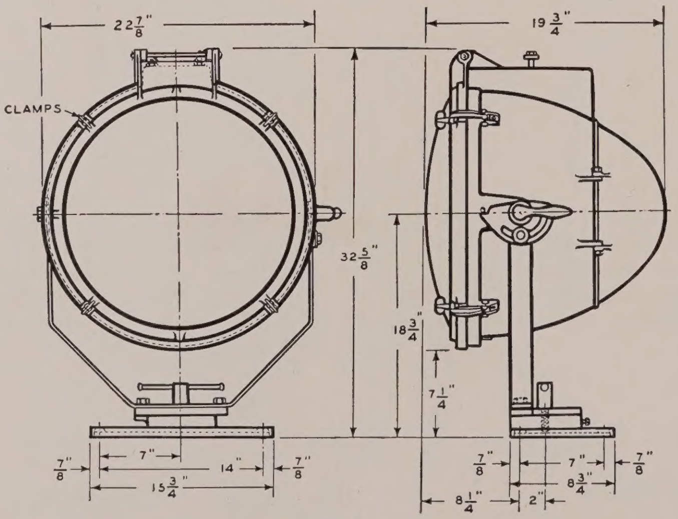


Fig. 3
Dimensions—Type LCE-1020

Discounts: Schedule "F"

Type LCE-24 Floodlight Projectors

Medium and Long Range—2000-Watt

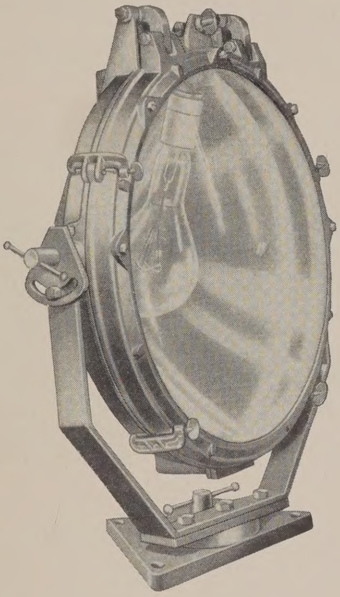


Fig. 1
Type LCE-24

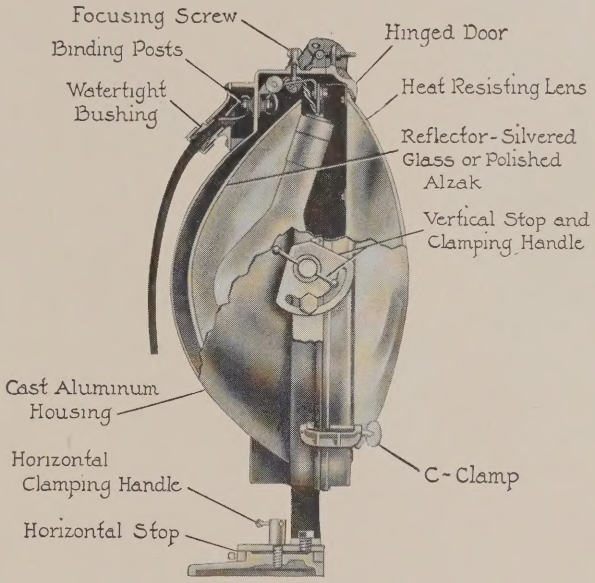

Focusing Screw
Binding Posts
Watertight Bushing
Hinged Door
Heat Resisting Lens
Reflector-Silvered Glass or Polished Alzak
Vertical Stop and Clamping Handle
Cast Aluminum Housing
Horizontal Clamping Handle
Horizontal Stop
C-Clamp

Fig. 2
Type LCE-24—Sectional View

Type LCE-24 floodlight projector is designed to utilize the maximum amount of the light of the lamp and this increase in efficiency allows large areas to be lighted with a smaller number of projectors, with a corresponding decrease in installation cost, lighting load, and maintenance costs. Unless otherwise specified, the projector is equipped with a clear, plain lens. However, a clear, spread lens which produces an elliptical beam of light, or a clear, diffusing lens can be furnished without additional charge, if specified on the order.

Description		Lamp		With Glass Reflector	With Polished Alzak Reflector	List, each
		Watts	Bulb	Cat. No.	Cat. No.	
LCE-24	With Narrow Beam Reflector	1500 or 2000	PS-52	40466	42781	$190.00
	With Narrow Beam Reflector	1500	G-48	40468	42841	190.00
	With Wide Beam Reflector	1500 or 2000	PS-52	40467	42782	190.00

Prices do not include incandescent lamps.

Discounts: Schedule "F"

Type LCE-24 Floodlight Projectors

Medium and Long Range—2000-Watt

Housing: Cast aluminum alloy, dust-tight, non-ventilated, and weatherproof.

Reflectors: 24-inch, crystal mirrored glass or polished Alzak, narrow or wide beam. See section 206, page 5.

Mountings: Steel trunnion on cast Feraloy base. Both horizontal and vertical adjustable stops are provided. The floodlight can be turned around or tipped over for convenience in relamping and cleaning, and returned to its exact original setting.

Special bases and brackets for various mounting conditions can be furnished. See section 206, pages 1 and 2.

Focusing Mechanism: Hand operated by wing nut on outside of case.

Peep-Sights: Two tubular peep-sights are provided on the inside of the case. These are set at the factory so that by sighting through the tubes at the center of the filament, the lamp can be properly focused in the daytime.

Lamp Receptacle: Porcelain Mogul screw base (Cat. No. HL8751).

Wiring Connections: A connection box with cover having threaded hub, and with binding posts for convenient connection is provided on the rear of the case. A stuffing box is provided for making a watertight connection to the lead wires. This connector has a rubber bushing which will clamp flexible cord from ½ to ⅝ inch diameter.

Door Frame: Cast aluminum alloy, hinged at top and clamped to the housing by five special "C" clamps.

Lens: Clear, plain, convex, heat-resisting Pyrex, 24½ inches in diameter. Clear, spread, or diffusing, convex, heat-resisting lens can be furnished without additional charge, if specified on the order. See section 206, page 4.

Lamps: 1500 or 2000-watt, PS-52 bulb; 1500-watt, G-48 bulb.

Louvers: Circular louvers for eliminating all spill light can be provided (Cat. No. HL2667—List Price, $20.00).

Hood: A sheet aluminum hood or visor for redirecting spill light to the ground beneath the floodlight, or to eliminate glare, can be furnished (Cat. No. HL8706—List Price, $12.00).

Finish: Case, natural aluminum; base and trunnion, galvanized.

Net Weight: 94 lbs.

Shipping Weight: 148 lbs.

Light Distribution Data

Reflector	Lens	Lamp			Beam			Beam Spread	
		Watts	Bulb	Lumens	Lumens	Efficiency	C.P.	Horizontal	Vertical
Narrow Beam	Plain	1500	G-48	28400	11670	41%	910800	11°	10½°
	45° Spread				12070	42½%	255800	42°	11°
	80° Spread				12280	43%	133000	80°	11°
Wide Beam	Plain	2000	PS-52	41000	18040	44%	363500	20°	18°
Narrow Beam	Plain	2000	PS-52	41000	18450	45%	415500	18°	16°
	45° Spread				17640	43%	211800	45°	19°
	80° Spread				18860	46%	128000	80°	18°
	50° Diffusing				18310	44½%	70160	50°	50°
	90° Diffusing				20500	50%	62860	90°	85°

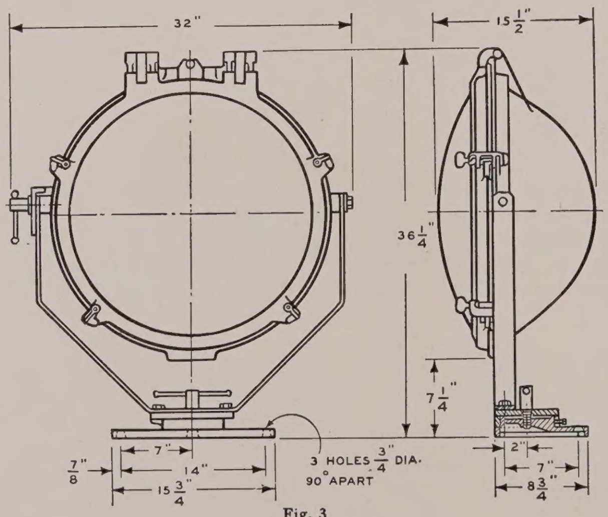


Fig. 3
Dimensions—Type LCE-24

Floodlights for Fire Fighting

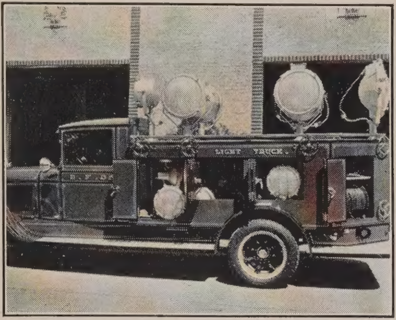


Fig. 1
Truck—Beaumont, Texas

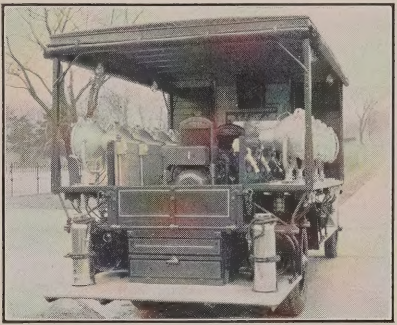


Fig. 4
Truck—Albany, N. Y.

Fig. 3
Truck—Chicago, Ill.
At a Night Fire

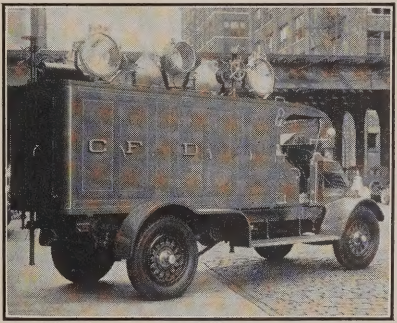


Fig. 2
Truck—Chicago, Ill.

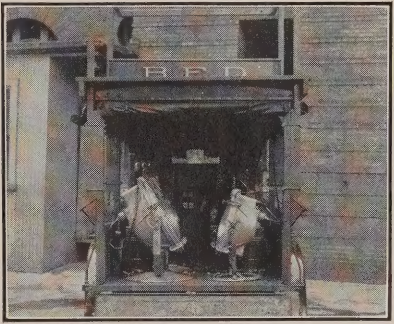


Fig. 5
Truck—Boston, Mass.

Night fires can be fought more effectively and with greater safety if the scene of action can be lighted brilliantly. Floodlights will project the light where it is needed, through rain, snow, and smoke.

A great many cities are equipping trucks with floodlights and searchlights for this purpose. The powerful light from these units enables the direction of the streams to be controlled more accurately and allows firemen to work safely and to escape the dangers of unguarded elevator shafts, stairways, slippery floors, and roofs. It also speeds up the picking up of the hose and other equipment after the fire is out, thereby eliminating delay in returning companies to service.

Not only are these floodlight trucks valuable for fighting fires, but they have also proved their value for general emergency work in cases of wrecks, drownings, riots, or for emergency repairs of water mains.

A floodlight truck can easily be made independent of exterior power supply by installation of an automatic engine generator plant. These can be obtained up to 10 K. W. capacity. They turn on automatically when the first light is turned on.

A few portable floodlights, such as type ADR-12 can easily be placed on any truck. Special floodlight trucks should be equipped with one or two type DCE-16 searchlights. These are installed permanently on the roof of the truck, and their powerful, narrow beams can be directed at the most distant points.

Type LCE-1120, 1500-watt floodlights provide a powerful but much wider beam, and are a semi-portable unit. They can be equipped with a large cast aluminum wheel base, so that they will stand up wherever they are placed. They can be secured to the top of the truck with large hand screws and will normally be left there to provide general illumination. In case, however, a powerful floodlight is needed for mounting on the roof of an adjoining building or some other point of vantage, they can quickly be disconnected and taken to the distant point.

Two smaller sizes of portable floodlights are types ADR-12 and ADR-14. They are equipped with carrying handles and large wheel bases. They are furnished with 10 feet of rubber-covered cable and a twist lock plug. Any length cable required can be furnished. Steel grids can be furnished to protect the lens from accidental breakage. These portable units are valuable for placing at various points of vantage outside the building and can be conveniently carried into the building. Even in the daytime, they may be valuable for carrying into basements where the electric current has been shut off.

Cables for the portable floodlights should be kept on reels. A convenient means of connection is in use by the Chicago Fire Department. Each end of the extra lengths of cable and each floodlight is equipped with a BP8532 plug. Several assemblies of X Condulets with four receptacles are used as connectors and terminals for these lengths of cable. This provides at the end of each cable a place to plug in three floodlights, and at each coupling two side taps can be taken off.

Wire Sizes: It is important that cable of the proper size be selected for long runs. A 5% voltage drop will reduce the light output of an incandescent lamp 16½%, and is the maximum that should be allowed. The table on the next page gives the maximum lengths of cable of various sizes for varying loads.

Floodlights for Fire Fighting

WIRE SIZE TABLE

Total Lamp Watts at End of Cable	Maximum Length of Cable for 5% Voltage Drop				
	#14	#12	#10	#8	#6
200	600 Feet	950 Feet	1515 Feet	2410 Feet	3825 Feet
500	240 Feet	380 Feet	608 Feet	965 Feet	1535 Feet
1000	120 Feet	190 Feet	304 Feet	482 Feet	770 Feet
1500	80 Feet	127 Feet	202 Feet	321 Feet	510 Feet
2000	....	95 Feet	151 Feet	240 Feet	382 Feet
3000	....	....	....	161 Feet	256 Feet

Selection of Floodlights: As a guide to the selection of the number and types of floodlights for different size engine generator sets, the following lists are suggested:

1½ K. W. Generator	2 K. W. Generator	5 K. W. Generator	10 K. W. Generator
3 ADR-14, 500-watt floodlights or 1 DCE-16, 500-watt searchlight 5 ADR-12, 200-watt floodlights	1 DCE-16, 500-watt searchlight 3 ADR-14, 500-watt floodlights or 1 DCE-16, 1000-watt searchlight 5 ADR-12, 200-watt floodlights	1 DCE-16, 1000-watt searchlight 8 ADR-14, 500-watt floodlights or 1 DCE-16, 1000-watt searchlight 2 LCE-1120, 1500-watt floodlights 5 ADR-12, 200-watt floodlights	2 DCE-16, 1000-watt searchlights 4 LCE-1120, 1500-watt floodlights 4 ADR-14, 500-watt floodlights or 2 DCE-16, 1000-watt searchlights 2 LCE-1120, 1500-watt floodlights 8 ADR-14, 500-watt floodlights 5 ADR-12, 200-watt floodlights

Selection of Lenses: The floodlights are listed with plain and diffusing lenses. Spread lenses, giving an elliptical beam, can be furnished without extra charge. Type DCE-16 should always be used with plain lenses.

The other floodlights with plain lenses will give a light spot when thrown on the wall of a building equal to .6 the distance to the wall. In other words, at 100 feet they would give a 60-foot spot.

When equipped with a spread lens, the spot will be the same height as with a plain lens. Its width will be .8 the distance to the wall, or 80 feet at 100 feet distance.

A diffusing lens gives a spot 1.4 times the distance; 14 feet wide at 10 feet, or 140 feet wide at 100 feet. This lens should be used for short range lighting.

Engineering Service: The Crouse-Hinds Company can supply floodlights of all types with a great many different types of bases. Crouse-Hinds engineers will be glad to recommend the best equipment to meet special requirements. The Crouse-Hinds line of Condulets, plugs and receptacles, and switches is unusually complete. Complete wiring suggestions for any floodlight truck will be furnished on request.

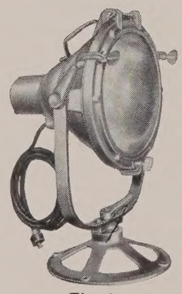


Fig. 6
Type ADR-12

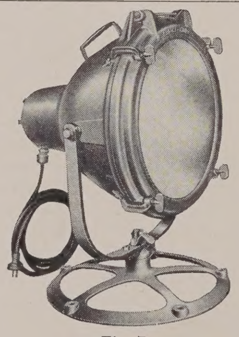


Fig. 7
Type ADR-14

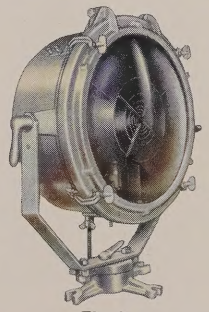


Fig. 8
Type DCE-16

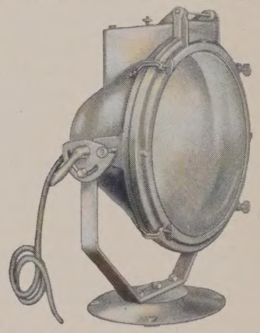


Fig. 9
Type LCE-1120

Description†		Lens	Lamp		Net Weight	Cat. No.	List, each
			Watts	Bulb			
ADR-12	With Narrow Beam Alzak Reflector	Plain	200	PS-30	22¼ lbs.	42950	$ 41.00
	With Narrow Beam Alzak Reflector	Plain	250	G-40	22¼ lbs.	42023A	41.00
	With Wide Beam Alzak Reflector .	Diffusing	200	PS-30	22¼ lbs.	42024A	41.00
ADR-14	With Narrow Beam Alzak Reflector	Plain	500	PS-40	36 lbs.	42951	$ 63.00
	With Narrow Beam Alzak Reflector	Plain	500	G-40	36 lbs.	42783A	63.00
	With Wide Beam Alzak Reflector .	Diffusing	500	PS-40	36 lbs.	42784A	63.00
LCE-1120	With Wide Beam Alzak Reflector .	Plain	1500	PS-52	70 lbs.	42745	$140.00
DCE-16§	With Narrow Beam Reflector . . .	Plain	1000	T-20	50 lbs.	41983*	$200.00

Prices do not include incandescent lamps.

All the above units, except types DCE-16 and LCE-1120, are furnished with wheel base and carrying handle. BP8532 plugs will be furnished at an advance of $5.25 in the list prices. Grids can be furnished at an additional price.

*Includes circular louvers. †All reflectors, except for type DCE-16, are of polished Alzak.

§See section 205, page 2, for additional searchlights.

Discounts: Schedule "F"

Type RCDE-8 Explosion-Proof Floodlights

200-Watt

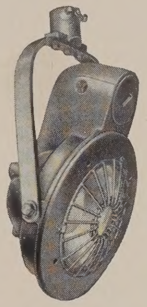


Fig. 1
Type RCDE-8
With Suspension Mounting

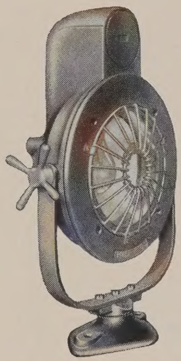


Fig. 2
Type RCDE-8
With Trunnion Mounting

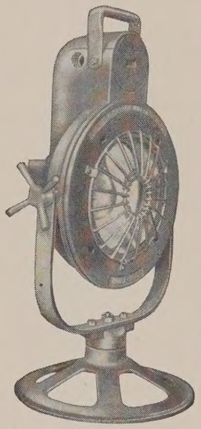


Fig. 3
Type RCDE-8—Portable

Type RCDE-8 is designed to meet the requirements of an explosion-proof floodlight.

It is recommended for use around oil refineries, chemical plants, and for lighting spray booths from the outside. For short range lighting, the wide beam etched Alzak reflector should be used; for longer range or for spotlight applications, the polished Alzak reflector provides a narrower beam.

As a portable unit, the aluminum door and housing are usually preferable on account of weight. Aluminum should be used where the unit will be subjected to hydrogen sulphide fumes.

Description		Housing	Door	Net Wt.	With Narrow Beam Polished Alzak Reflector		With Wide Beam Etched Alzak Reflector	
					Cat. No.	List, each*	Cat. No.	List, each*
RCDE-8	**With Trunnion Mounting** For Permanent Installation (Fig. 2)	Feraloy	Aluminum	52 lbs.	41719A	$ 75.00	41720A	$71.75
		Feraloy	Brass	67 lbs.	41721A	85.00	41722A	81.75
		Aluminum	Aluminum	35 lbs.	41723A	75.00	41724A	71.75
		Brass	Brass	71 lbs.	41725A	102.00	41726A	98.75
	With Trunnion For Suspension Mounting (Fig. 1)	Aluminum	Aluminum	32 lbs.	41989A	$ 72.00	41990A	$68.75
		Feraloy	Aluminum	49 lbs.	41991A	72.00	41992A	68.75
		Brass	Brass	68 lbs.	41993A	99.00	41994A	95.75
	Portable Unit With Handle and Wheel Base (Fig. 3)	Aluminum	Aluminum	35 lbs.	41727A	$ 76.00	41728A	$72.75

Prices do not include incandescent lamps.

Any of the above units with narrow beam reflector will be arranged for use with 150-watt, PS25-bulb lamps without extra charge, if specified on the order.

*If grid is not desired, deduct $2.00 from the list prices.

Discounts: Schedule "F"

Type RCDE-8 Explosion-Proof Floodlights

200-Watt

Housing: Cast Feraloy, cast aluminum, or cast brass.

Door: Cast aluminum or cast brass. A threaded joint with at least five full threads is provided between the door and the housing. Four blind holes are provided in the door to facilitate tightening or removing it. Two ⅜-inch bolts or steel pins at least 2½ inches long can be placed in two of these holes and a bar used across them.

Reflectors: 8-inch, wide beam etched Alzak, for short range (Cat. No. KL666); or narrow beam polished Alzak, for long range (Cat. No. KL662).

Mountings: Suspension—A steel trunnion with a threaded fitter for 1½-inch pipe. It is recommended for hanging the unit from the ceiling, and is especially adaptable for lighting spray booths.

Trunnion—A steel trunnion with cast aluminum base for mounting the unit permanently but leaving it free to be tipped vertically or turned horizontally. Special bases, listed in section 206, pages 1 and 2, can be supplied.

Portable—The portable unit is provided with a carrying handle and a wheel base large enough to permit the floodlight to stand by itself.

Lamp Receptacle: Porcelain medium screw base (Cat. No. HL6019).

Wiring: The wiring chamber is separated from the floodlight housing by a wall and the point where the wires pass through the wall is sealed with a special compound. Ample room is provided for splicing. A threaded cover is provided for the wiring chamber. Three short leads of asbestos-covered wire are furnished. One wire is grounded to the housing. No cable is furnished for portable floodlight units. Three-wire cable, suitable for use in hazardous locations, should be used. A CGB connector for clamping cable from ¼ to ⅜ of an inch diameter is furnished in one hub of the wiring chamber for portable units only. Floodlights with trunnion mounting should be installed with rigid conduit and type ECG, ECH, or ECK flexible couplings listed in section 85, page 60, Condulet Catalog 2500.

Lens: 8½-inch, plain, impact, and heat-resisting glass. A refracting screen, designed to refract the light in one direction, can be furnished (Cat. No. HL5905—List Price, $1.00). It is mounted underneath the outer lens and can be rotated to throw the light in any one direction.

Lamps: 100-watt, A23 or PS25; 150-watt, PS25; or 200-watt, PS30-bulb lamps. For long range, narrow beam, 150-watt, P25-bulb concentrated filament lamp should be used. The lamp receptacle bracket is adjustable and can be set for any of these lamps except the 150-watt, P-25 by loosening two screws and sliding the bracket until the lamp filament is at the center of the reflector. Unless otherwise specified on the order, all units are shipped with the lamp receptacle set for the 200-watt lamp. If the 150-watt, P25-bulb lamp is to be used, a special lamp receptacle and adapter are supplied.

Grid: A heavy steel grid is provided over the lens. It can easily be removed to facilitate cleaning.

Plugs: The portable unit should be equipped with an explosion-proof plug or a BP49 plug for use with FSQ series interlocked plug receptacle and switch Condulets.

Finish: Cast Feraloy housing, cadmium-galvanized. Cast aluminum or cast brass, natural finish.

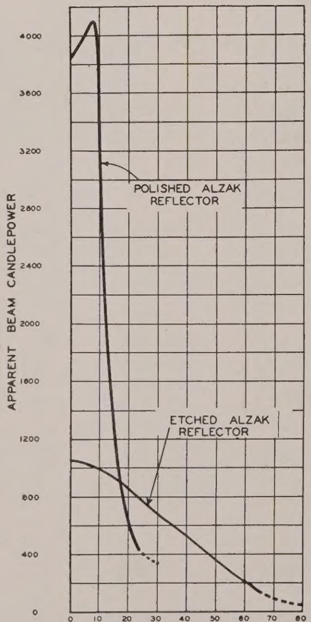


Fig. 4
Light Distribution Curves
RCDE-8 with 200-Watt, 115-Volt, PS30-Bulb, General Lighting Service Lamp

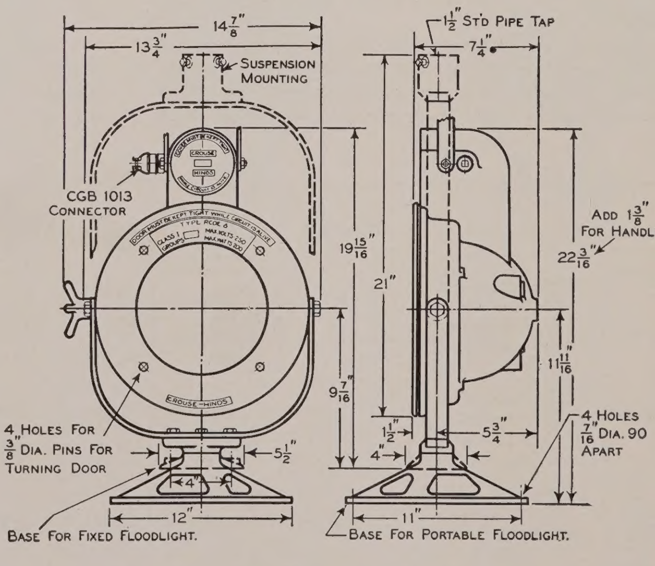


Fig. 5
Dimensions—Type RCDE-8

Discounts: Schedule "F"

Types RM, RMU, RME, and RMF Floodlights

Short and Medium Range

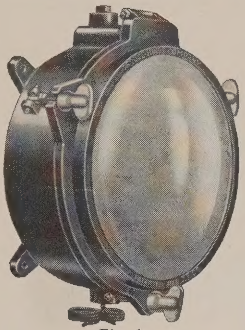


Fig. 1
Type RM

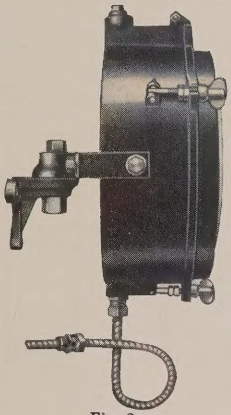


Fig. 2
Type RMU

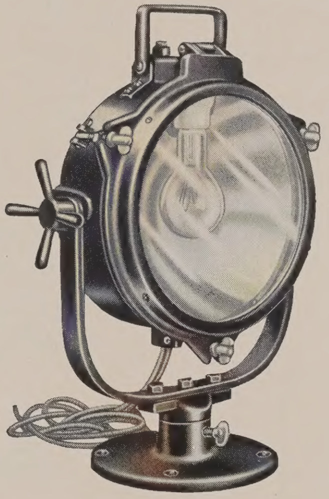


Fig. 3
Type RME

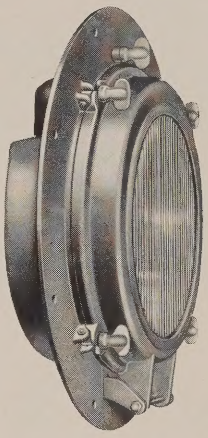


Fig. 4
Type RMF

Types RM and RMU floodlights meet lighting requirements in roundhouses, steel mills, on construction work, or wherever stationary, strong, gas and moisture-proof illuminating units are desired.

Type RME is a rugged, cast Feraloy floodlight for portable use. It is invaluable around railroad shops and yards where repairs must be made to heavy apparatus, and a strong light is necessary. It can be used to great advantage when working under cars and locomotives.

Type RMF is designed for flush mounting in a wall, with a projection of only 2¾ inches from the surface. When equipped with a 100° spread lens and polished Alzak reflector, it makes an ideal lighting unit for mounting in the side walls of airplane hangars to provide light under the wings and on the sides of planes. The housing is cast aluminum.

Type	Mounting	Lamp		With Wide Beam Etched Alzak Reflector		With Narrow Beam Polished Alzak Reflector	
		Watts	Bulb	Cat. No.	List, each	Cat. No.	List, each
RM-10	Surface	60 or 100	A	29788A	$22.00	40407A	$28.00
RM-12	Surface	150 or 200	PS	26067A	$26.00	40408A	$33.00
RMU-10	Wall Bracket	60 or 100	A	29793A	$34.00	40409A	$40.00
RMU-12	Wall Bracket	150 or 200	PS	29657A	$38.00	40410A	$45.00
RME-10	Trunnion	60 or 100	A	29803A	$39.00	40411A	$45.00
RME-12	Trunnion	150 or 200	PS	29480A	$43.00	40412A	$50.00
RMF-12	Flush	150 or 200	PS	42931	$33.00	42930	$40.00

Prices do not include incandescent lamps.

Types RM, RMU, RME, and RMF Floodlights

Short and Medium Range

Housing: RM, RMU, RME—cast Feraloy; RMF—cast aluminum, gas and moistureproof.

Reflectors: Wide beam etched Alzak or narrow beam polished Alzak, 10 or 12-inch. See section 206, page 5.

Mountings: Type RM fastens to flat surface by four lugs on back. Type RMU has a universal wall bracket. Type RME has a trunnion, a swivel base, and a carrying handle. Type RMF is made for flush mounting with a wide flange.

Focusing Mechanism: Lamp receptacle mounted on bracket, adjustable with screw driver.

Lamp Receptacle: Porcelain medium screw base (Cat. No. HL674).

Wiring Connections: RM, RMU, RME—¾-inch threaded hubs at top and bottom. A pipe plug is furnished to close the unused hub. RMF—two side hubs for through feed. Standard is tapped for ¾ inch. Will be tapped any size up to 1¼ inches without extra charge.

Wire: RM, RME—two three-foot leads No. 14 gauge stranded, weatherproof wire. RMU—30 inches of steel armored cable with two CGB285 connectors. RMF—no wire furnished.

Door Frame: RM, RMU, RME—cast Feraloy; RMF—cast aluminum, gasketed. Held by three swivel locking bolts.

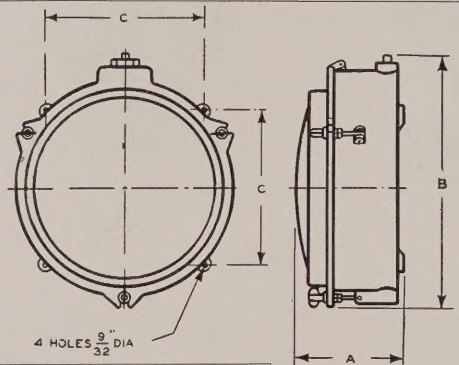
Lens: Clear, plain, convex, Pyrex, heat-resisting. Spread or diffusing, convex, heat-resisting lens can be furnished without additional charge, if specified on the order. See section 206, page 4.

Lamps: 10-Inch Floodlights—60 or 100-watt, A bulb. 12-Inch Floodlights—150 or 200-watt, PS bulb.

Hoods: Cast Feraloy, with the underside porcelain enameled. See section 206, page 5. These hoods fit types RM, RME, and RMU only.

Finish: RM, RMU, RME—baked black enamel; RMF—aluminum.

Net Wts.: RM-10—20 lbs. RM-12—30 lbs. RMU-10—27 lbs. RMU-12—37.5 lbs. RME-10—35 lbs. RME-12—45 lbs. RMF-12—21 lbs. **Ship. Wts.:** RM-10—38 lbs. RM-12—48 lbs. RMU-10—56 lbs. RMU-12—62 lbs. RME-10—53 lbs. RME-12—63 lbs. RMF-12—40 lbs.



Type	A	B	C
RM-10	5⅞	14	8⅜
RM-12	6¹¹⁄₁₆	16⅝	10¹⁄₁₆

Fig. 5
Dimensions—Type RM

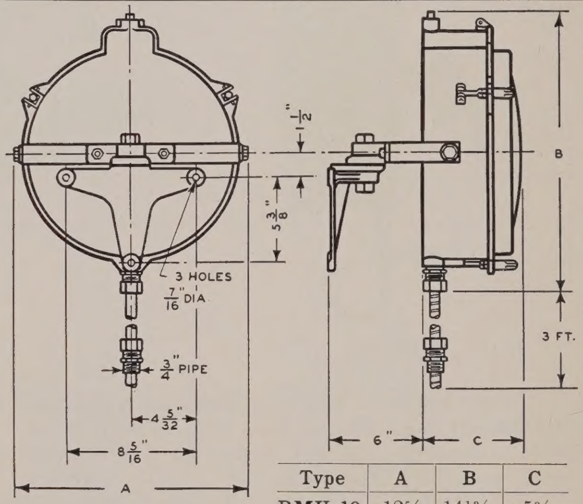


Fig. 7
Dimensions—Type RMU

Type	A	B	C
RMU-10	12⅝	14¹³⁄₁₆	5¾
RMU-12	15	17¼	6⁵⁄₁₆

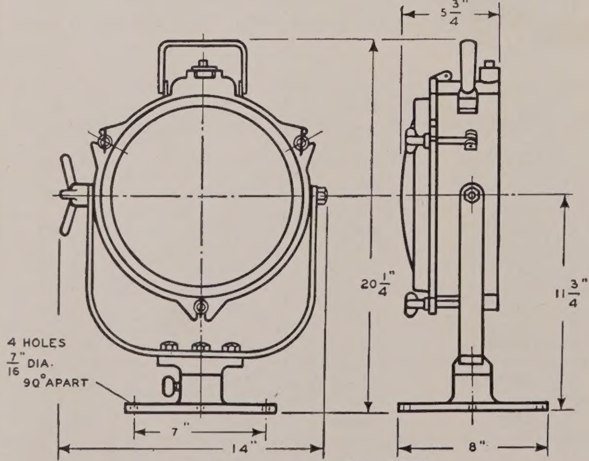


Fig. 6—Dimensions—Type RME

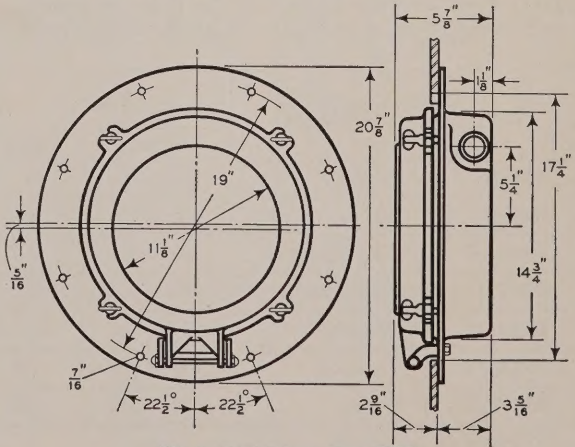


Fig. 8—Dimensions—Type RMF

Types MDB-8 and MDB-10 Floodlights

8-Inch, 100-Watt **10-Inch, 200-Watt**

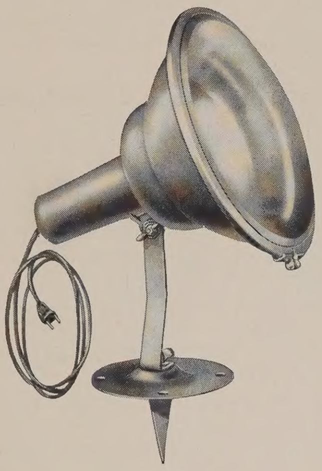


Fig. 1
Type MDB-10

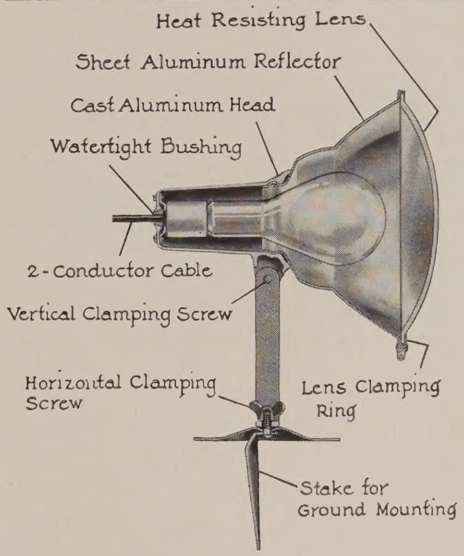


Fig. 2
Type MDB-10—Sectional View

Types MDB-8 and MDB-10 floodlights are light weight, low-priced, weatherproof units. They are ideally suited to such installations as the lighting of residential yards and driveways, gardens, shrubbery, and Christmas trees, and for lighting of roadstands and model houses.

The round flange base can be bolted to any flat horizontal or vertical surface by means of four ¼-inch bolts. A steel stake is provided for temporary mounting on the ground.

When furnished with polished Alzak reflector, these units become spotlights, which are ideal for such purposes as spotlighting of merchandise in show windows and stores.

Description		Color of Lens	With Wide Beam* Etched Aluminum Reflector		With Narrow Beam Polished Alzak Reflector	
			Cat. No.	List, each	Cat. No.	List, each
MDB-8	100-Watt	Clear	42403	$ 6.50	42409	$ 9.50
		Red	42434	8.50	42442	11.50
		Amber	42435	8.50	42443	11.50
		Green	42436	8.50	42444	11.50
		Blue	42437	8.50	42445	11.50
MDB-10	200-Watt	Clear	42405	$10.50	42411	$14.50
		Red	42438	14.50	42446	18.50
		Amber	42439	14.50	42447	18.50
		Green	42440	14.50	42448	18.50
		Blue	42441	14.50	42449	18.50

Accessories and Parts for Types MDB-8 and MDB-10

Description	For MDB-8		For MDB-10	
	Cat. No.	List, each	Cat. No.	List, each
Plain Lens	HL5375	$ 1.70	HL6813	$ 3.50
Spread Lens	HL5376	1.70	HL6815	3.50
Diffusing Lens	HL5377	1.70	HL6814	3.50
Plain Red Lens	HL5754	3.70	KL507	7.50
Plain Amber Lens	HL5753	3.70	KL508	7.50
Plain Green Lens	HL5755	3.70	KL509	7.50
Plain Blue Lens	KL511	3.70	KL510	7.50
Lamp Receptacle	HL4203	.60	HL4203	.60

Prices do not include incandescent lamps.

When furnished without lens or clamping ring, deduct from the list prices of complete floodlight as follows: MDB-8, $2.00; MDB-10, $4.00.

*Wide beam floodlights can be furnished in etched Alzak finish at an advance in the list prices as follows: MDB-8, $1.50; MDB-10, $2.00.

Types MDB-8 and MDB-10 Floodlights

8-Inch, 100-Watt **10-Inch, 200-Watt**

Housing: Cast aluminum neck with sheet aluminum housing.

Reflectors: The inside surface of the housing forms the reflector. Wide beam reflectors are etched. Narrow beam reflectors are polished and are of permanent, non-tarnishing Alzak finish.

Mounting: The mounting is adjustable horizontally and vertically with wing nuts for clamping the adjustments. The round flat base is provided with four holes for ¼-inch bolts or screws to fasten to any flat surface. They are easily attached to any type of surface.

A steel stake is furnished with each unit for mounting on the ground.

Lamp Receptacle: Medium screw.

Wiring Connections: Four feet of two-conductor cable with rubber plug.

Lens: Plain, clear, heat-resisting, clamped to the housing by a split ring. Spread or diffusing lenses can be furnished, and colored, heat-resisting lenses are available for color floodlighting.

Lamps: MDB-8, 75 or 100-watt, A-23 bulb; MDB-10, 150 or 200-watt, PS bulb.

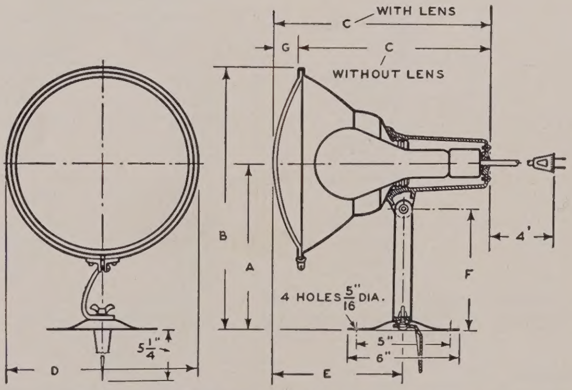
Finish: Aluminum.

Net Weights: MDB-8, 3¾ lbs. MDB-10, 4¾ lbs.

Shipping Weights: MDB-8, 7½ lbs. MDB-10, 9 lbs.

Light Distribution Data

Type	Reflector	Lens	Lamp		Beam		Beam Spread	
			Watts	Bulb	Lumens	C.P.	Horizontal	Vertical
MDB-8	Wide Beam	Plain	100	A-23	865	956	109°	109°
	Narrow Beam	Plain			554	7340	32°	32°
	Narrow Beam	Spread			792	3950	50°	42°
MDB-10	Wide Beam	Plain	200	PS-30	2130	2640	115°	115°
	Narrow Beam	Plain			1312	11940	36½°	38°
	Narrow Beam	Spread			1626	7140	65°	48°



Type	A	B	C	D	E	F	G
MDB-8	7⅞	12 3/16	9⅜	8⅝	5¾	5 17/32	15/16
MDB-10	8¾	13⅞	11 9/16	10⅜	6 15/16	6⅜	1 5/16

Fig. 3
Dimensions—Types MDB-8 and MDB-10

Types MDB-14 and MDB-16 Floodlights

14-Inch, 500-Watt **16-Inch, 1000-Watt**

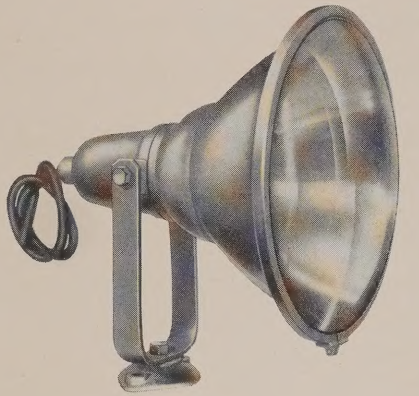


Fig. 1
Type MDB with Standard Base

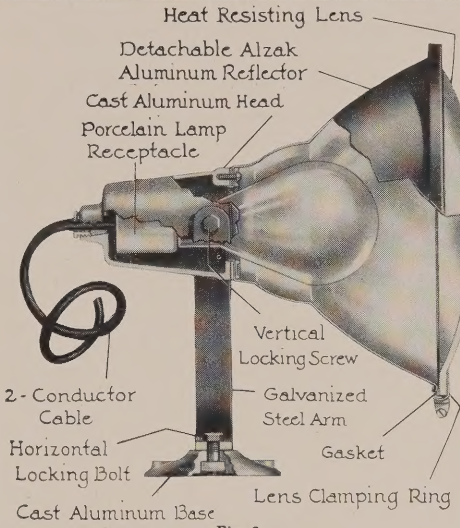

Heat Resisting Lens
Detachable Alzak Aluminum Reflector
Cast Aluminum Head
Porcelain Lamp Receptacle
Vertical Locking Screw
2-Conductor Cable
Galvanized Steel Arm
Horizontal Locking Bolt
Gasket
Lens Clamping Ring
Cast Aluminum Base

Fig. 2
Type MDB—Sectional View

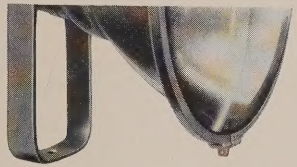


Fig. 3
Cross-Arm Base
For Type MDB

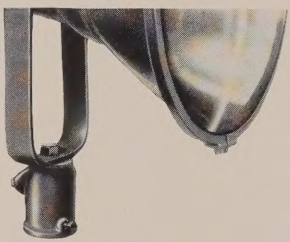


Fig. 4
Slip-Fitter Mounting
For Type MDB

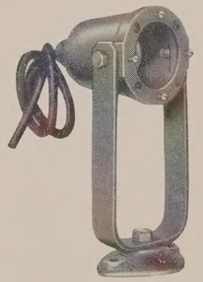


Fig. 5
Type MDB Head and
Support Complete, and with
Standard Base

Types MDB-14 and MDB-16 projectors are light weight, low-priced, weatherproof floodlights. They are furnished with heat-resisting clear lenses.

Interchangeable Reflectors: The cast aluminum socket housing and the support are the same for both MDB-14 and MDB-16. There are three reflectors for each size: narrow, medium, and wide beam. The reflector is attached to the housing by four screws and keyhole slots, making it easy to attach, detach, or interchange reflectors. When installing the floodlights, the housing and mounting can be installed and wired complete before the reflector is attached.

Description		With Wide Beam Etched Alzak Reflector 115° Spread		With Medium Beam Etched Alzak Reflector 70° Spread		With Narrow Beam Polished Alzak Reflector 20° Spread	
		Cat. No.	List, each	Cat. No.	List, each	Cat. No.	List, each
MDB-14	With Standard Base	42491	$26.00●	42461	$26.00●	42462	$31.00●
	With Slip Fitter	42487	27.00●	42495	27.00●	42721	32.00●
	With Cross-Arm Base	42488	25.00●	42496	25.00●	42722	30.00●
	Reflector Only with Lens	42489	16.50●	42497	16.50●	42723	21.50●
MDB-16	With Standard Base	42490	$34.00●	42465	$34.00●	42466	$40.00●
	With Slip Fitter	42484	35.00●	42492	35.00●	42498	41.00●
	With Cross-Arm Base	42485	33.00●	42493	33.00●	42499	39.00●
	Reflector Only with Lens	42486	24.50●	42494	24.50●	42500	30.50●

Prices do not include incandescent lamps.

When furnished without lens or clamping ring, deduct from the list prices of complete floodlight as follows: MDB-14, $6.00; MDB-16, $11.00.

Lenses: Floodlights listed on this page are complete with clear, plain lenses. Spread or diffusing clear lenses will be furnished without extra charge, if specified on the order. Color screens can be furnished at an advance in list prices as follows: 1000-watt, $13.00; 500-watt, $9.00. ●Denotes price change.

Discounts: Schedule "F"

Types MDB-14 and MDB-16 Floodlights

14-Inch, 500-Watt

16-Inch, 1000-Watt

Housing: Cast aluminum neck, with sheet aluminum housing.

Reflectors: The inside surface of the housing forms the reflector. Wide and medium beam reflectors are of etched Alzak. Narrow beam reflectors are polished and are of permanent non-tarnishing Alzak finish. Narrow beam reflectors are recommended for spotlight and other long range applications. The reflectors are quickly detachable from the neck and mounting, by loosening four screws and twisting the reflector. The neck and mounting are the same for both 500 and 1000-watt floodlights. This means that a 500-watt installation can be raised to 1000-watt units by merely changing reflectors, without disturbing the wiring or mounting.

Mountings: Standard Base—A flat base with holes for two ⅜-inch bolts for fastening to a flat surface. The standard mounting arm can be turned back so as to mount the floodlight on a vertical surface such as the side of a pole or building. See drawings in section 207, page 4.

Cross-Arm or Bolt-Base—The cross-arm base is furnished with a hole for a ⅝-inch bolt for attaching to any flat surface.

Slip Fitter—For 1½-inch pipe, complete with wire outlet.

Lamp Receptacle: Mogul screw base. See listing below.

Wiring: Three feet of two-conductor cable is furnished with each floodlight.

Lens: Plain, clear, heat-resisting, clamped to the housing by a split ring. Spread or diffusing lenses can be furnished.

Lamps: MDB-14—300 or 500-watt, PS-bulb, 110-volt General Lighting Service lamps. MDB-16—750 or 1000-watt, PS52-bulb, 110-volt General Lighting Service lamps.

Hood: A sheet aluminum hood can be furnished. It is riveted to the lens clamping ring and can be rotated to any desired position. See listing below.

Finish: Aluminum.

Net Weights: MDB-14, 10½ lbs. MDB-16, 13½ lbs.

Shipping Weights: MDB-14, 21 lbs. MDB-16, 25 lbs.

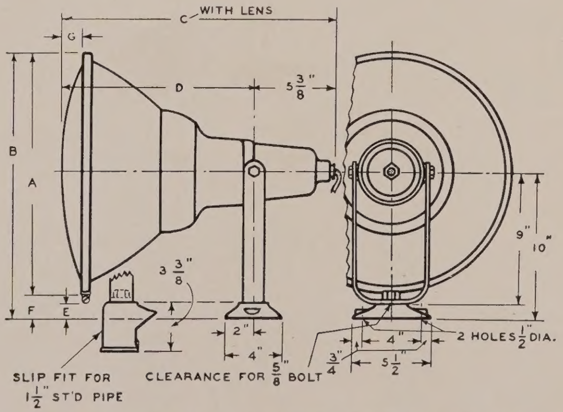
Head and Support Complete for Types MDB-14 and MDB-16

Description	Cat. No.	List, each
Cross Arm	42724	$ 8.50●
1½-Inch Slip Fitter	42725	10.50●
Standard Base	42726	9.50●

Accessories and Parts for Types MDB-14 and MDB-16

Description	For MDB-14		For MDB-16	
	Cat. No.	List, each	Cat. No.	List, each
Plain Lens	HL9151	$6.00●	HL6804	$9.00●
Spread Lens	HL3090	6.00●	HL6810	9.00●
Diffusing Lens	HL9153	6.00●	HL6805	9.00●
Reflector Gasket	HL6230	.20	HL6230	.20
1½-Inch Slip Fitter Only	KL397	2.00	KL397	2.00
Lamp Receptacle	HL5298	1.50	HL5298	1.50
Hood with Clamping Ring	KL399	5.50	KL506	6.50
Hood (Additional, if furnished with floodlight)	....	4.00	....	4.00

Prices do not include incandescent lamps. ●Denotes price change.



Type	A	B	C	D	E	F	G
MDB-14	14¼	17⅛	16⅛	10¾	2⅜	2⅞	1⅜
MDB-16	16¾	17¾	18⅞	13¼	¾	1	1⅜

Fig. 6
Dimensions—Types MDB-14 and MDB-16

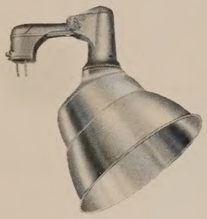
Type MUA Floodlights

Open Type—750 to 1500-Watt

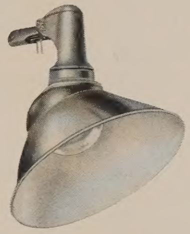
The New Universal and Interchangeable Floodlight Line

ALUMALUX

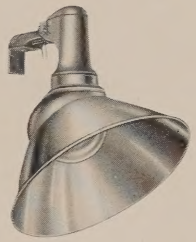
Alzak Aluminum



With 115° Reflector



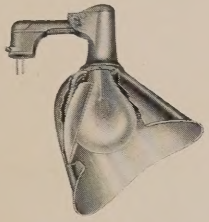
With 70° Reflector



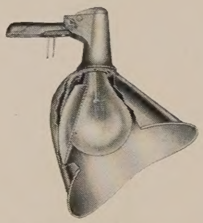
With 20° Reflector

ELLIPTALUX

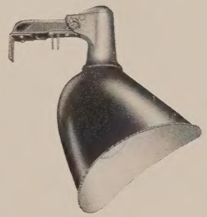
Porcelain Enamel



With Etched Alzak Auxiliary Reflector



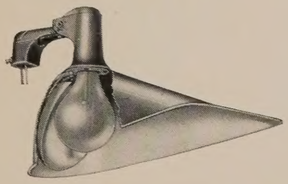
With Polished Alzak Auxiliary Reflector



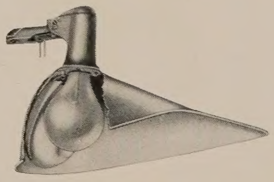
Without Auxiliary Reflector

MULTALUX

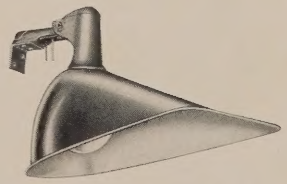
Porcelain Enamel



With Etched Alzak Auxiliary Reflector



With Polished Alzak Auxiliary Reflector



Without Auxiliary Reflector

Type MUA is a universal, open type floodlight which has a complete line of interchangeable and detachable reflectors. Any light distribution desired, from that of a spotlight to the widest spread floodlight, is available.

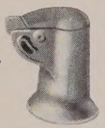
The MUA line of open floodlights is designed for lighting gasoline service stations, tennis courts, playgrounds, swimming pools, parking spaces, football fields, baseball and softball fields. Bulletin 2299, entitled "Nighttime is Playtime," describes in detail the applications of type MUA floodlights to outdoor sports lighting. A copy will be sent on request.

●Denotes change in illustrations.

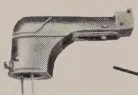
Type MUA Floodlights

Open Type—750 to 1500-Watt

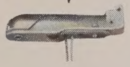
1 HEAD 3 MOUNTINGS 9 REFLECTORS



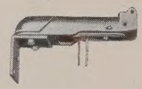
Head Only



Slip-Fitter Mounting

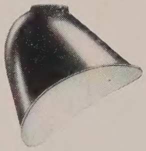


Cross-Arm Mounting

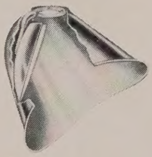


Pole-Bracket Mounting

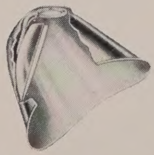
Elliptalux Reflectors
Porcelain Enamel



Without Auxiliary Reflector

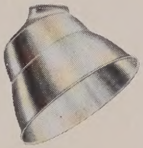


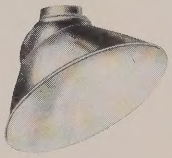
With Etched Alzak Auxiliary Reflector



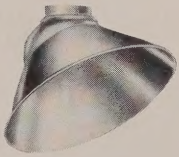
With Polished Alzak Auxiliary Reflector

Alumalux Reflectors
Alzak Aluminum



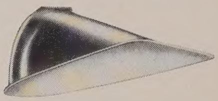


70° Reflector

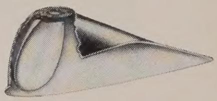


20° Reflector

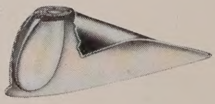
Multalux Reflectors
Porcelain Enamel



Without Auxiliary Reflector

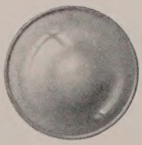


With Etched Alzak Auxiliary Reflector



With Polished Alzak Auxiliary Reflector

Accessories for Alumalux Reflectors

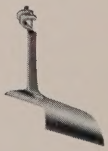


Plain Lens

Diffusing Lens

Spread Lens

Hood



Auxiliary Reflector

•Denotes change in design of type MUA head, and addition of auxiliary reflector illustration.

Type MUA Floodlights

Open Type—750 to 1500-Watt

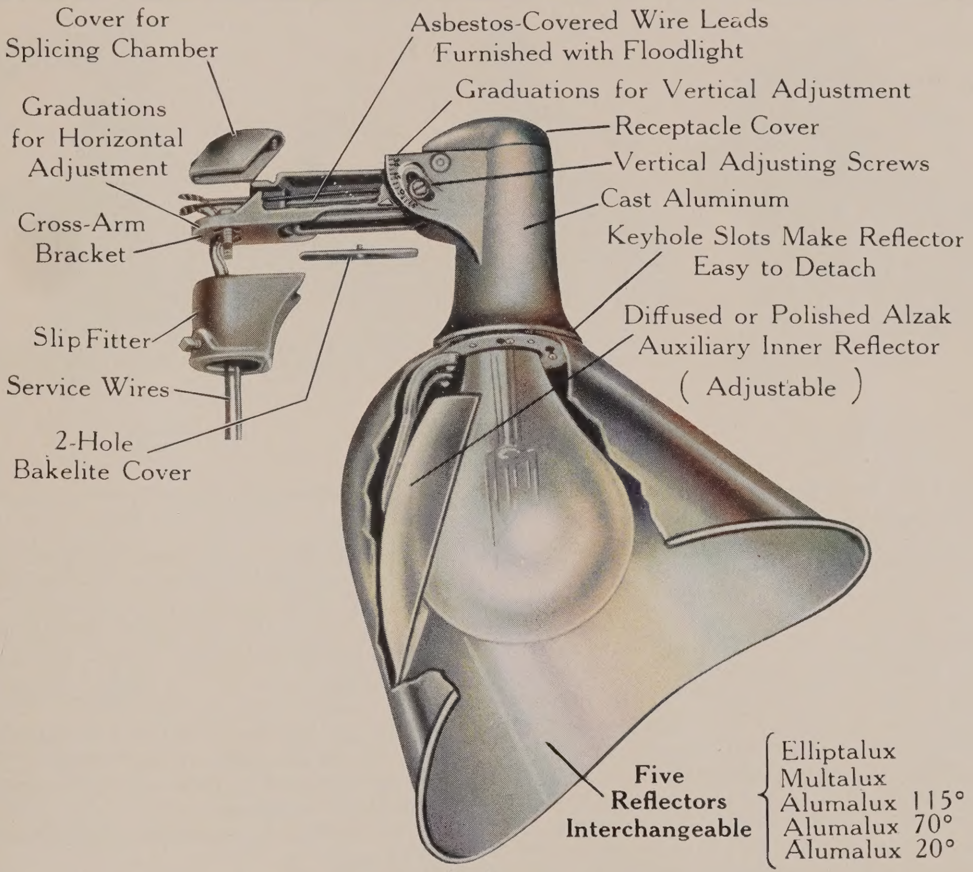

Cover for Splicing Chamber
Graduations for Horizontal Adjustment
Cross-Arm Bracket
Slip Fitter
Service Wires
2-Hole Bakelite Cover
Asbestos-Covered Wire Leads Furnished with Floodlight
Graduations for Vertical Adjustment
Receptacle Cover
Vertical Adjusting Screws
Cast Aluminum
Keyhole Slots Make Reflector Easy to Detach
Diffused or Polished Alzak Auxiliary Inner Reflector (Adjustable)
Five Reflectors Interchangeable
Elliptalux
Multalux
Alumalux 115°
Alumalux 70°
Alumalux 20°

Fig. 1●
Type MUA
Broken-away and Exploded View

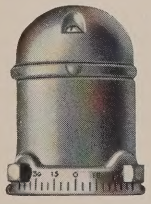


Fig. 2
Horizontal Adjustment
Graduations for
Slip-Fitter Mounting

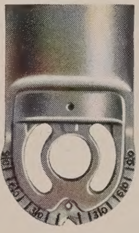


Fig. 3
Horizontal Adjustment
Graduations for Cross-Arm
and Pole-Bracket Mountings

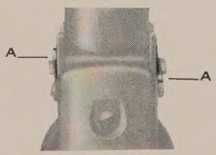


Fig. 4●
Top View
Showing Vertical
Clamping Wedges
Inclined in Opposite Directions

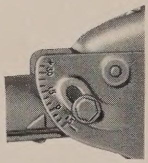


Fig. 5●
Vertical Adjustment
Graduations

Graduated Adjustments: The degree markings on the horizontal and vertical adjustments of type MUA floodlights take the guess work out of setting the floodlights for most effective results. Floodlights formerly had to be directed at night and, particularly if a large number were involved as on an athletic field, the services of an experienced floodlighting engineer were required, if the best results were to be obtained.

The exact setting in both horizontal and vertical planes can be furnished by Crouse-Hinds engineers for most installations. The setting is done in the daytime, when the floodlights are installed.

●**Vertical Clamping Wedges:** The vertical adjustment is locked in position by means of two cap screws extending through slots. These slots are made in the shape of wedges (see "A", Fig. 4). The wedge on one side slopes upward, while the wedge on the reverse side slopes downward. These two wedges hold the floodlight in the position in which it is locked, and by their wedge action prevent any possibility of slipping.

●Denotes change and addition.

Type MUA Floodlights

Open Type—750 to 1500-Watt

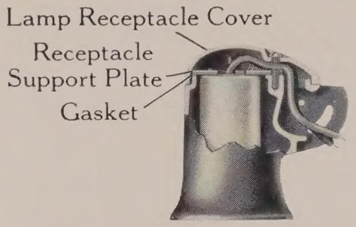


Fig. 6
Type MUA Head
Broken-away View

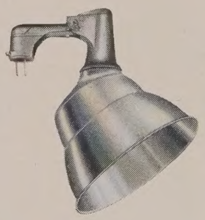


Fig. 7
Type MUA Alumalux
Listed on Pages 5 and 6
of this Section

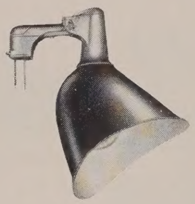


Fig. 8
Type MUA Elliptalux
Listed on Pages 9 and 10
of this Section

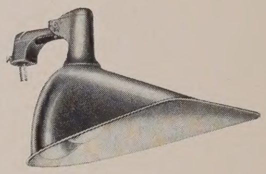


Fig. 9
Type MUA Multalux
Listed on Pages 13 and 14
of this Section

MUA Line: The MUA line of open floodlights consists of three distinctly different types of reflectors, each of which can be furnished in several combinations. All of the reflectors are interchangeable on the same head, and each reflector has different lighting characteristics. These reflectors are described below.

MUA Alumalux: There are three reflectors in the Alumalux line of aluminum reflectors. They have beam spreads of 115, 70, and 20° respectively. This wide range of beam spread provides better light control and more efficient lighting than can be accomplished with other types of open floodlights. It is now possible with these reflectors to confine practically all of the light to the area involved, even when the floodlights must be mounted at a distance.

The Alumalux floodlights are listed on pages 5 and 6 of this section. The standard finish is Alzak, which combines high efficiency with a smooth, hard, permanent surface which is easily cleaned.

Alumalux floodlights can be furnished with heat-resisting lenses, or with a hood for a sharp cut-off on top or side.

An auxiliary Alzak aluminum reflector is now available for the 70 and 20° units. This reflector deflects the direct lamp rays above the axis and directs them into the main beam. This eliminates glare in the eyes of spectators and adds to the useful light.

MUA Elliptalux: The Elliptalux reflectors are of porcelain enameled steel, elliptical in shape. Two types of auxiliary reflectors can be mounted inside the main reflector to provide auxiliary beams of greater concentration and candlepower. The auxiliary reflectors are made of aluminum with Alzak finish, which is permanent and easily cleaned. The effect produced by these reflectors is shown on pages 11 and 12 of this section.

The Elliptalux floodlights are listed on pages 9 and 10 of this section.

MUA Multalux: The Multalux reflector is of porcelain enameled steel, and is particularly well adapted to lighting the average service station and similar areas. The beam from this reflector lights a wide area, with considerable light thrown behind the pole on which it is mounted and with a sharp top cut-off. Two types of auxiliary reflectors can be mounted inside the main reflector. They provide either a wide auxiliary beam, or a narrow concentrated beam for the illumination of the building or the pumps. The effect produced by these reflectors is shown on pages 15 and 16 of this section.

The Multalux floodlights are listed on pages 13 and 14 of this section.

Mercury Vapor Lighting: The 400-watt high pressure mercury vapor lamp can be used in any of the standard type MUA floodlights. This lamp provides a light output equal to that of a 750-watt incandescent lamp. On account of the bluish green color of the light from this lamp, it is sometimes advisable to use it in combination with incandescent lamps. When used in type MUA floodlights, it is recommended that two floodlights be mounted on each pole, one equipped with a mercury vapor lamp and the other with a 750-watt incandescent lamp. The combination of the light from these two sources is a close approximation to daylight.

The high pressure mercury vapor lamps must be operated base up. They cannot be operated at an angle. Type MUA floodlights will be furnished with the vertical adjustment locked if this is specified. They can also be furnished with a non-adjustable head for conduit suspension.

•Denotes addition and change in illustrations.

Type MUA Floodlights—Alumalux

Open Type—750 to 1500-Watt

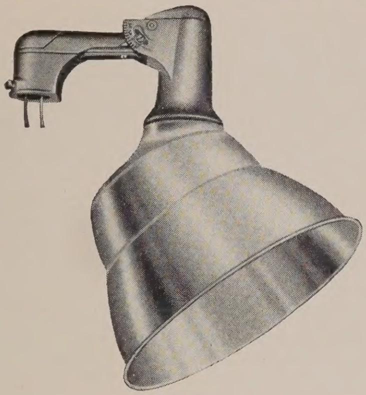


Fig. 1
Type MUA Alumalux
16-Inch Reflector
With Slip Fitter

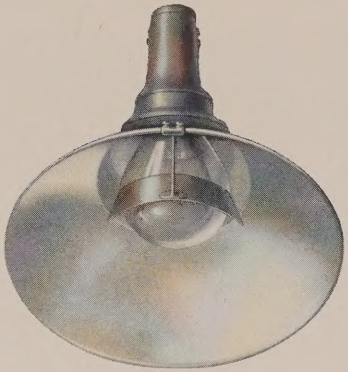


Fig. 2
Type MUA Alumalux
18-Inch Reflector
With Auxiliary Reflector

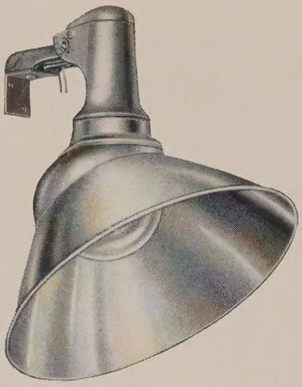


Fig. 3
Type MUA Alumalux
18-Inch Reflector
With Pole Bracket

Crouse-Hinds type MUA Alumalux floodlight is a unit of the MUA interchangeable line. It is made with three types of reflectors, which give any beam spread required from 20 to 115°. The standard finish is permanent, non-tarnishing Alzak, which is easily cleaned and restored to its original efficiency.

Wide Beam Alumalux Reflector: This reflector is designed for wide spread, short range applications. The beam spread is approximately 115°.

Medium Beam Alumalux Reflector: This reflector is designed for a beam spread of approximately 70°. The center candlepower is about four times that of the wide beam reflector. This reflector is very effective and efficient for medium range projection.

Narrow Beam Alumalux Reflector: This reflector has a beam spread of 20°. Its center candlepower is twenty times that of the wide beam reflector. It is very effective for spotting small areas. The reflecting surface is polished Alzak finish.

Easy to Clean: The reflector of the Alumalux floodlight is easily removed for cleaning, by simply loosening four screws and twisting the reflector.

Easy to Install: The Alumalux floodlight is unusually easy to install and wire. The head and support, which weighs only 4½ lbs., can be installed and wired complete, and the reflector attached later. See wiring features on page 6 of this section.

Description		With Wide Beam Etched Alzak 16-Inch Reflector 115° Spread		With Medium Beam Etched Alzak 18-Inch Reflector 70° Spread		With Narrow Beam Polished Alzak 18-Inch Reflector 20° Spread	
		Cat. No.	List, each	Cat. No.	List, each	Cat. No.	List, each
MUA Alumalux	With Slip Fitter	42391	$24.00	42394	$27.00	42397	$34.00
	With Cross-Arm Base	42392	22.00	42395	25.00	42398	32.00
	With Pole Bracket	42393	23.00	42396	26.00	42399	33.00
	With Pendent Head	42400	20.00	42401	23.00	42402	30.00
	Reflector Only	HL6490	13.00	HL6492	16.00	HL6493	23.00

Head and Support Complete for MUA Alumalux

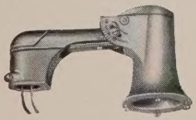


Fig. 4
Slip Fitter

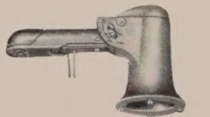


Fig. 5
Cross Arm

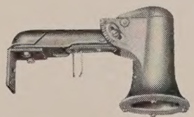


Fig. 6
Pole Bracket

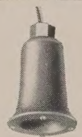


Fig. 7
Pendent Head

Description	Cat. No.	List, each
Slip Fitter	42177	$11.00
Cross Arm	42176	9.00
Pole Bracket	42178	10.00
Pendent Head	42380	7.00

Prices do not include incandescent lamps. •Denotes price and illustration changes.

Type MUA Floodlights—Alumalux

Open Type—750 to 1500-Watt

Housing: Cast aluminum alloy.

The Alumalux reflector is mounted on the standard interchangeable MUA head and support. This provides mountings for any condition.

Mountings: Slip Fitter—Cast aluminum for 1½-inch pipe.

Cross-Arm Base—Provision is made for mounting this base on a cross arm or other flat surface either by a single ¾-inch bolt or lag screw or by two ¼-inch bolts or lag screws. The two ¼-inch bolts fit in slots which allow a 90° rotation of the unit. The slip-fitter mounting can quickly be converted to cross-arm mounting by removing the two screws which hold the slip fitter to the bracket arm.

Pole Bracket—A steel bracket which can be fastened to the side of a wood pole or building with ⅝-inch bolts or lag screws.

Pendent Head—A pendent head, without mounting, but with top tapped for ¾-inch conduit.

•**Wiring Features:** Two leads of asbestos insulated wire attached to the lamp receptacle, run through the hollow bracket arm, for splicing to the rubber covered service wires. The lamp receptacle is easily accessible for inspection by removing one large screw which holds the retaining cap in position. A gasket under the receptacle support plate seals the top of the head. The wiring is entirely enclosed in the slip-fitter mounting. The removable cap over the slip fitter allows plenty of room for splicing. The floodlights are furnished with a blank bakelite cover which is located under the bracket arm and has two knockouts for wire holes for open wiring. This arrangement permits easy conversion from slip-fitter mounting, with enclosed wiring, to any of the other mountings with open wiring. A ½-inch nipple cover (Cat. No. 1734) will be furnished when armored cable is used for wiring. Cat. No. 1715 receptacle cover will be furnished, wired to the lamp receptacle for $ .50, list additional.

•**Auxiliary Reflector:** An auxiliary Alzak aluminum reflector can be clamped to the bead of the main 70 and 20° reflectors. This reflector deflects the direct lamp rays above the beam axis and reflects them into the main beam. These rays are usually wasted and in some cases constitute objectionable glare in the eyes of spectators, who may have to look toward the floodlights. The use of the auxiliary reflector allows the floodlights to be tipped higher in many cases, with more uniform lighting but without danger of glare. The auxiliary reflector also adds to the effective output of the floodlight, as this extra light is directed into the main beam. Auxiliary reflectors can be easily attached to existing installations of 18-inch Alumalux reflectors.

Enclosing Lens: Type MUA Alumalux floodlights can be furnished with a heat-resisting lens which keeps the reflector clean and protects the lamp. This lens is clamped to the housing by a split ring which is easily removed and attached by a thumb catch, making relamping simple and convenient. Plain lenses are normally used, but diffusing lenses are recommended where glare from the direct lamp rays is present.

Lamps: 750, 1000, or 1500-watt, PS52-bulb General Lighting Service lamps. Floodlights will be furnished arranged for standard 500-watt lamps, if specified. Hard glass lamps are recommended in open units to reduce breakage from driving rain or snow.

Lamp Receptacle: The standard receptacle is porcelain Mogul screw base (Cat. No. HL5906). A 3-contact receptacle (Cat. No. HL5907) for the 3-lite type (400, 600, 1000-watt) lamp, can be furnished at $ .65, list additional.

Hood: A sheet aluminum hood with clamping ring to fit the reflector bead is listed below.

Net Weight: 6¾ lbs.

Shipping Weight: 12 lbs.

Accessories and Parts for MUA Alumalux

Description	Cat. No.	List, each
Outside Reflector Gasket	HL6230	$ .20
Standard Lamp Receptacle with Leads	HL5989	1.25
3-Lite Lamp Receptacle with Adapter Plate and Leads	KL393	1.90
1½-Inch Slip Fitter	HL5887	2.00
Pole Bracket Only	HL5888	1.00
Plain, Heat-Resisting Lens with Clamping Ring for 16-Inch Aluminum Reflector	HL5471	12.50
Plain, Heat-Resisting Lens with Clamping Ring for 18-Inch Aluminum Reflector	HL5922	16.50
Diffusing, Heat-Resisting Lens with Clamping Ring for 16-Inch Reflector	HL5923	12.50
Hood with Clamping Ring for 16-Inch Reflector	HL5507	4.00
Hood with Clamping Ring for 18-Inch Reflector	KL226	4.00
Auxiliary Reflector for 18-Inch 70 or 20° Reflectors (Fig. 2, Page 5)	KL1196•	2.00

Prices do not include incandescent lamps. •Denotes addition, and change in description and illustration.

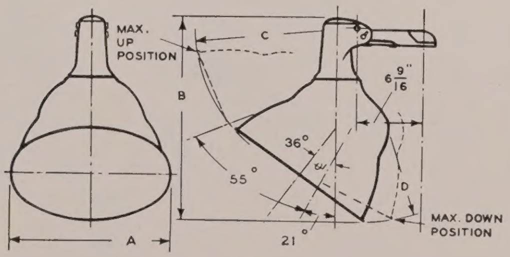


Fig. 8•
Dimensions—Type MUA Alumalux
With Aluminum Reflector

Size	A	B	C	D
16-Inch	16	21	16	19
18-Inch	18	21¾	16½	19⅝

Dimensions are in Inches

Light Distribution—Type MUA Alumalux

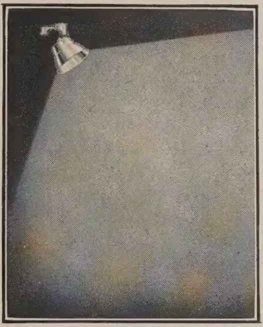


Fig. 1
Wide Beam 115° Reflector

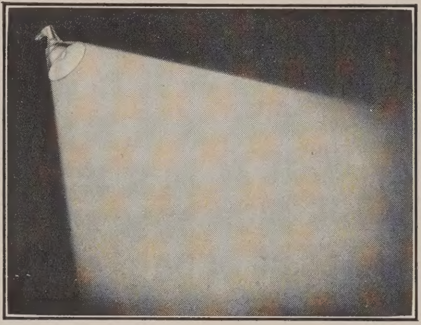


Fig. 2
Medium Beam 70° Reflector

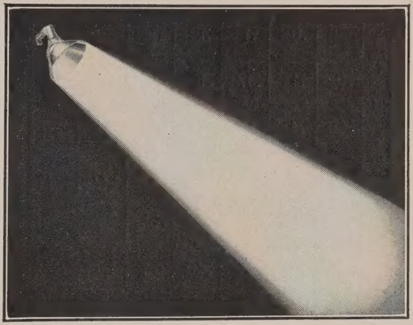


Fig. 3
Narrow Beam 20° Reflector

The approximate effect produced by the various Alumalux reflectors is shown in Figs. 1, 2, and 3 above. The actual intensities produced on the ground are shown in the charts on page 8. These charts provide a simple method of determining the number and location of floodlights to light a given area. The .25 foot candle line represents the approximate edge of the lighted area. Enough floodlights should always be used so that the beams overlap and every point receives light from more than one floodlight. Annoying shadows can be prevented by choosing enough mounting locations, so that each point receives light from more than one direction.

The large size charts to scale of ⅛ and 1/10 of an inch to the foot simplify the layout work where actual intensities at various points are desired. They can be placed under a tracing of the area to be lighted, and the intensities produced from each unit at any point can be read directly.

The intensities produced and the area lighted by the narrow beam reflector vary so rapidly with the angle at which the reflector is tilted that the most practical method of showing it is by the table given below.

Lighting problems involving unusual conditions should be referred to the Crouse-Hinds Company, Illumination Department, where engineers experienced in every form of lighting will suggest the best solution.

The lighting of most sports areas with open floodlights has been standardized. Standard layouts are shown in Bulletin 2299.

Distribution of Alumalux—20° Spread

Type MUA Alumalux 20° has a narrow beam spotlight reflector. It is used to spot small areas located at a distance to a high intensity. The distribution shown applies with a plain lens or without lens. A spread lens, which produces an elliptical beam of the same height but approximately twice as wide, can be furnished.

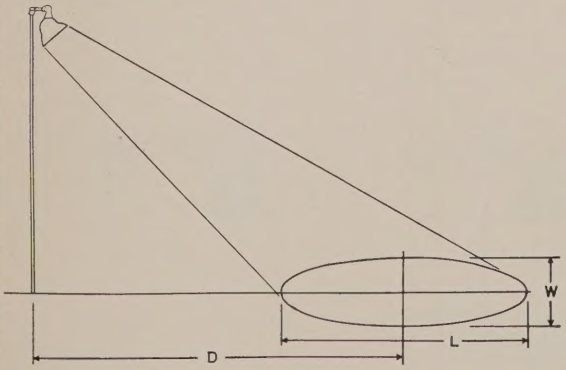


Fig. 4

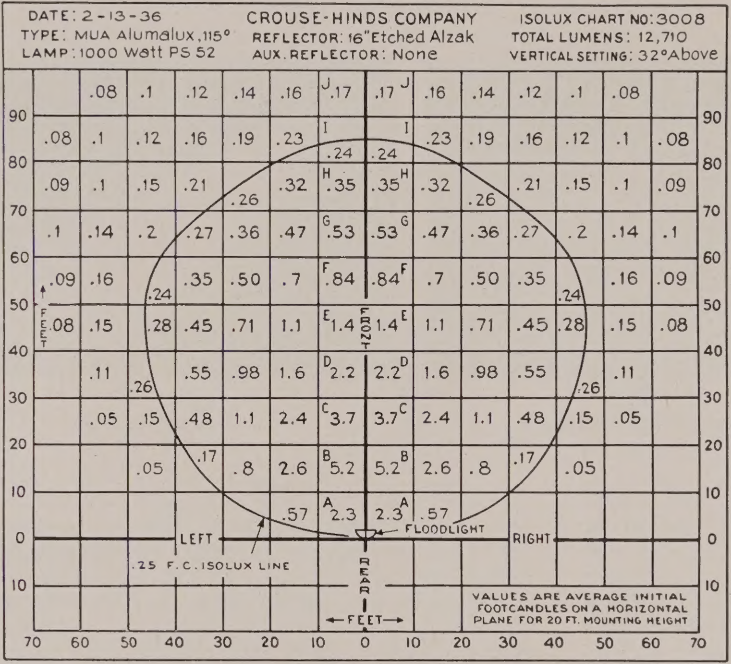
18-Inch Alumalux Reflector—20°

Horizontal Area Lighted

Distance D		Length L	Width W	Intensity	
				Average	Maximum
30	20′ Mounting Height	26	15	24.	90.
40		42	18	12.7	47.
50		66	26	6.3	26.
60	30′ Mounting Height	63	27	5.6	21.
75		99	38	2.8	11.5

Dimensions are in Feet

Light Distribution—Type MUA Alumalux



DATE: 2-13-36
TYPE: MUA Alumalux, 115°
LAMP: 1000 Watt PS 52

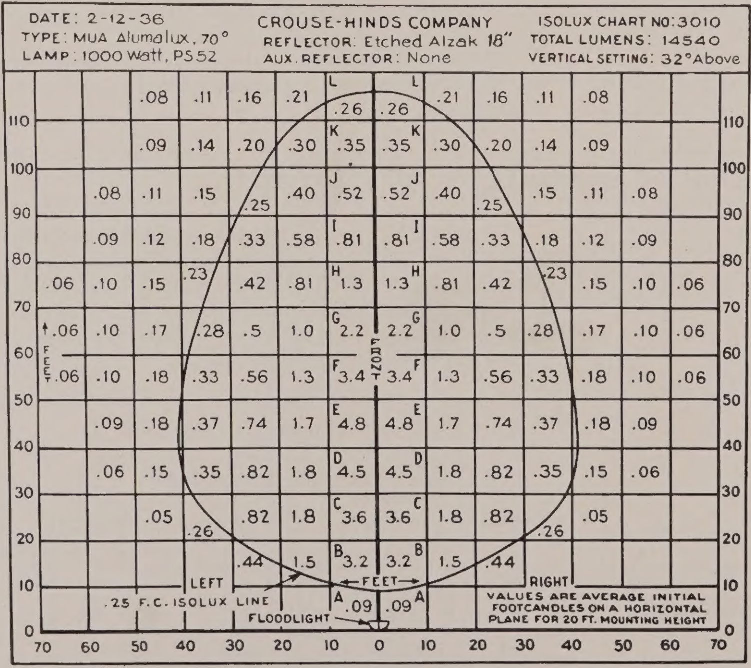
CROUSE-HINDS COMPANY
REFLECTOR: 16" Etched Alzak
AUX. REFLECTOR: None

ISOLUX CHART NO: 3008
TOTAL LUMENS: 12,710
VERTICAL SETTING: 32° Above

Feet	70–60	60–50	50–40	40–30	30–20	20–10	10–0	0–10	10–20	20–30	30–40	40–50	50–60	60–70
90–100		.08	.1	.12	.14	.16	J .17	.17 J	.16	.14	.12	.1	.08	
80–90	.08	.1	.12	.16	.19	.23	I .24	I .24	.23	.19	.16	.12	.1	.08
70–80	.09	.1	.15	.21	.26	.32	H .35	.35 H	.32	.26	.21	.15	.1	.09
60–70	.1	.14	.2	.27	.36	.47	G .53	.53 G	.47	.36	.27	.2	.14	.1
50–60	.09	.16	.24	.35	.50	.7	F .84	.84 F	.7	.50	.35	.24	.16	.09
40–50	.08	.15	.28	.45	.71	1.1	E 1.4	1.4 E	1.1	.71	.45	.28	.15	.08
30–40		.11	.26	.55	.98	1.6	D 2.2	2.2 D	1.6	.98	.55	.26	.11	
20–30		.05	.15	.48	1.1	2.4	C 3.7	3.7 C	2.4	1.1	.48	.15	.05	
10–20			.05	.17	.8	2.6	B 5.2	5.2 B	2.6	.8	.17	.05		
0–10						.57	A 2.3	2.3 A	.57					

VALUES ARE AVERAGE INITIAL FOOTCANDLES ON A HORIZONTAL PLANE FOR 20 FT. MOUNTING HEIGHT

Fig. 5
Alumalux—115° Spread
1000-Watt Lamp



DATE: 2-12-36
TYPE: MUA Alumalux, 70°
LAMP: 1000 Watt, PS52

CROUSE-HINDS COMPANY
REFLECTOR: Etched Alzak 18"
AUX. REFLECTOR: None

ISOLUX CHART NO: 3010
TOTAL LUMENS: 14540
VERTICAL SETTING: 32° Above

Feet	70–60	60–50	50–40	40–30	30–20	20–10	10–0	0–10	10–20	20–30	30–40	40–50	50–60	60–70
110–120			.08	.11	.16	.21	L .26	L .26	.21	.16	.11	.08		
100–110			.09	.14	.20	.30	K .35	K .35	.30	.20	.14	.09		
90–100		.08	.11	.15	.25	.40	J .52	J .52	.40	.25	.15	.11	.08	
80–90		.09	.12	.18	.33	.58	I .81	I .81	.58	.33	.18	.12	.09	
70–80	.06	.10	.15	.23	.42	.81	H 1.3	H 1.3	.81	.42	.23	.15	.10	.06
60–70	.06	.10	.17	.28	.5	1.0	G 2.2	G 2.2	1.0	.5	.28	.17	.10	.06
50–60	.06	.10	.18	.33	.56	1.3	F 3.4	F 3.4	1.3	.56	.33	.18	.10	.06
40–50		.09	.18	.37	.74	1.7	E 4.8	E 4.8	1.7	.74	.37	.18	.09	
30–40		.06	.15	.35	.82	1.8	D 4.5	D 4.5	1.8	.82	.35	.15	.06	
20–30			.05	.26	.82	1.8	C 3.6	C 3.6	1.8	.82	.26	.05		
10–20					.44	1.5	B 3.2	B 3.2	1.5	.44				
0–10							A .09	A .09						

VALUES ARE AVERAGE INITIAL FOOTCANDLES ON A HORIZONTAL PLANE FOR 20 FT. MOUNTING HEIGHT

Fig. 6
Alumalux—70° Spread
1000-Watt Lamp

INTENSITIES AT OTHER MOUNTING HEIGHTS

Lamps	24 Feet High 750 W.	24 Feet High 1000 W.	24 Feet High 1500 W.	30 Feet High 750 W.	30 Feet High 1000 W.	30 Feet High 1500 W.
16-Inch Alumalux Reflector—115°						
A	1.0	1.4	2.3	.57	.80	1.3
B	2.2	3.1	5.0	1.2	1.7	2.7
C	2.2	3.1	4.9	1.5	2.2	3.5
D	1.5	2.1	3.3	1.2	1.7	2.7
E	.96	1.4	2.2	.92	1.3	2.1
F	.65	.92	1.5	.64	.90	1.5
G	.43	.60	.97	.47	.66	1.1
H	.28	.40	.64	.35	.50	.80
I	.21	.30	.48	.25	.35	.56
J	.14	.20	.32	.18	.25	.40
18-Inch Alumalux Reflector—70°						
B	1.5	2.1	3.4	.85	1.2	1.9
C	1.7	2.4	3.9	.99	1.4	2.3
D	1.9	2.7	4.4	1.1	1.6	2.6
E	2.3	3.3	5.3	1.3	1.8	2.9
F	2.3	3.2	5.2	1.5	2.1	3.4
G	1.7	2.4	3.9	1.6	2.2	3.5
H	1.2	1.7	2.7	1.3	1.8	2.9
I	.92	1.3	2.1	.99	1.4	2.3
J	.53	.75	1.2	.71	1.0	1.6
K	.36	.50	.80	.53	.75	1.2
L	.25	.35	.56	.35	.5	.8

The foot candle values, in the charts at the left and the table above, are the average intensities over each 10-foot square, and are for a 1000-watt lamp mounted 20 feet high and tilted at the angle given. For 750-watt lamp, multiply by .71. For 1500-watt lamp, multiply by 1.6. For other mounting heights, see table above.

These charts are available in 8½ x 10½-inch size, and to actual scales of ⅛ and 1/10 inch to the foot.

Type MUA Floodlights—Elliptalux

Open Type—750 to 1500-Watt

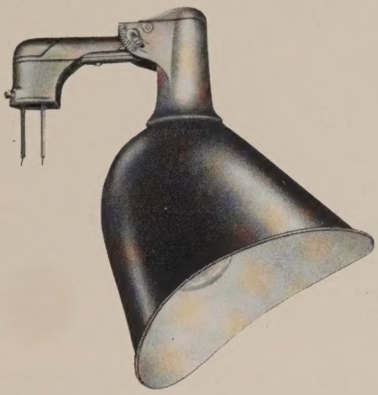


Fig. 1
Type MUA Elliptalux
With Slip Fitter

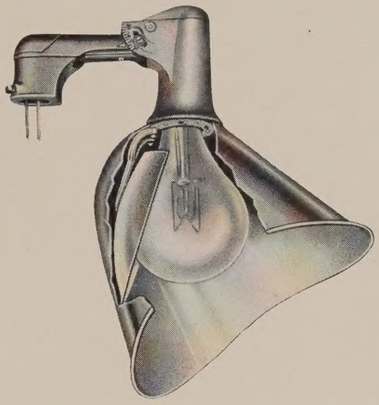


Fig. 2
Type MUA Elliptalux
With Auxiliary Reflector
and Slip Fitter

Crouse-Hinds type MUA Elliptalux floodlight is a unit of the MUA interchangeable line. The reflector is of porcelain enamel.

Porcelain Enameled Reflector: The large porcelain enameled reflector has a double coat of white porcelain on the inside, and blue porcelain on the outside.

Wide Beam Auxiliary Reflector: The wide beam auxiliary reflector is sheet aluminum with etched Alzak finish. It superimposes on the general distribution a wide beam of higher intensity for lighting distant areas.

Narrow Beam Auxiliary Reflector: The narrow beam auxiliary reflector is sheet aluminum with polished Alzak finish. It supplies a narrow beam of high intensity, having a spread of 40° horizontally by 27° vertically.

Easy to Clean: The reflector of the Elliptalux floodlight is easily removed for cleaning, by simply loosening four screws and twisting the reflector.

Easy to Install: The Elliptalux floodlight is unusually easy to install and wire. The head and support, which weighs only 4½ lbs., can be installed and wired complete, and the reflector attached later. See wiring features on page 10 of this section.

Description		Without Auxiliary Reflector		With Wide Beam Etched Alzak Auxiliary Reflector		With Narrow Beam Polished Alzak Auxiliary Reflector	
		Cat. No.	List, each	Cat. No.	List, each	Cat. No.	List, each
MUA Elliptalux	With Slip Fitter	42174	$21.00	42188	$24.00	42180	$27.00
	With Cross-Arm Base	42173	19.00	42187	22.00	42179	25.00
	With Pole Bracket	42175	20.00	42189	23.00	42181	26.00
	With Pendent Head	42381	17.00	42384	20.00	42382	23.00
	Reflector Only	HL5903	10.00	HL5908	13.00	HL5904	16.00

Head and Support Complete for MUA Elliptalux

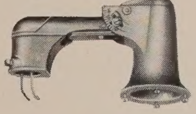


Fig. 3
Slip Fitter

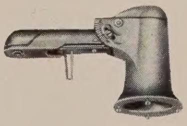


Fig. 4
Cross Arm

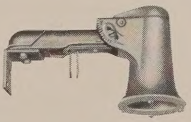


Fig. 5
Pole Bracket

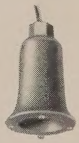


Fig. 6
Pendent Head

Description	Cat. No.	List, each
Slip Fitter	42177	$11.00
Cross Arm	42176	9.00
Pole Bracket	42178	10.00
Pendent Head	42380	7.00

Prices do not include incandescent lamps.
•Denotes illustration and price changes.

Type MUA Floodlights—Elliptalux

Open Type—750 to 1500-Watt

Housing: Cast aluminum alloy.

The Elliptalux reflector is mounted on the standard interchangeable MUA head and support. This provides mountings for any condition.

Mountings: Slip Fitter—Cast aluminum for 1½-inch pipe.

Cross-Arm Base—Provision is made for mounting this base on a cross arm or other flat surface either by a single ¾-inch bolt or lag screw or by two ¼-inch bolts or lag screws. The two ¼-inch bolts fit in slots which allow a 90° rotation of the unit. The slip-fitter mounting can quickly be converted to cross-arm mounting by removing the two screws which hold the slip fitter to the bracket arm.

Pole Bracket—A steel bracket which can be fastened to the side of a wood pole or building with ⅝-inch bolts or lag screws.

Pendent Head—A pendent head, without mounting, but with top tapped for ¾-inch conduit.

●**Wiring Features:** Two leads of asbestos insulated wire attached to the lamp receptacle, run through the hollow bracket arm, for splicing to the rubber covered service wires. The lamp receptacle is easily accessible for inspection by removing one large screw which holds the retaining cap in position. A gasket under the receptacle support plate seals the top of the head. The wiring is entirely enclosed in the slip-fitter mounting. The removable cap over the slip fitter allows plenty of room for splicing. The floodlights are furnished with a blank bakelite cover which is located under the bracket arm and has two knockouts for wire holes for open wiring. This arrangement permits easy conversion from slip-fitter mounting, with enclosed wiring, to any of the other mountings with open wiring. A ½-inch nipple cover (Cat. No. 1734) will be furnished when armored cable is used for wiring. Cat. No. 1715 receptacle cover will be furnished, wired to the lamp receptacle for $ .50, list additional.

Lamps: 750, 1000, or 1500-watt, PS52-bulb General Lighting Service lamps, or 400-watt mercury vapor lamp. Floodlights will be furnished arranged for standard 500-watt lamps, if specified. Hard glass lamps are recommended in open units to reduce breakage from driving rain or snow.

Lamp Receptacle: The standard receptacle is porcelain Mogul screw base (Cat. No. HL5906). A 3-contact receptacle (Cat. No. HL5907) for the 3-lite type (400, 600, 1000-watt) lamp, can be furnished at $ .65, list additional.

Net Weight: 9½ lbs.

Shipping Weight: 15 lbs.

Accessories and Parts for MUA Elliptalux

Description	Cat. No.	List, each
Wide Beam, Etched Alzak Auxiliary Reflector with Support Bracket	HL5924	$ 3.00
Narrow Beam, Polished Alzak Auxiliary Reflector with Support Bracket	HL5925	6.00
1½-Inch Slip Fitter Only	HL5887	2.00
Pole Bracket Only	HL5888	1.00
Outside Reflector Gasket	HL6230	.20
Standard Lamp Receptacle with Leads	HL5989	1.25
3-Lite Lamp Receptacle with Adapter Plate and Leads	KL393	1.90

Prices do not include incandescent lamps. ●Denotes change in description and illustration.

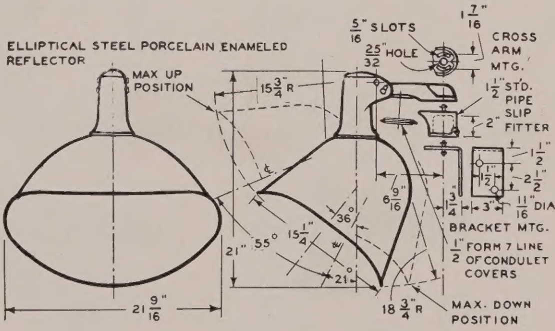


Fig. 7●
Dimensions—Type MUA Elliptalux
With Porcelain Enameled Reflector

Light Distribution—Type MUA Elliptalux

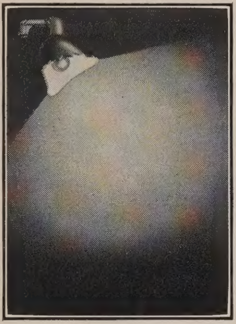


Fig. 1
Without Auxiliary Reflector

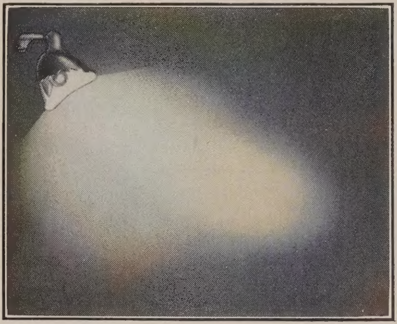


Fig. 2
With Wide Beam Etched Alzak Auxiliary Reflector

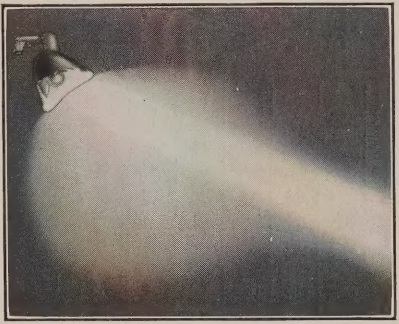


Fig. 3
With Narrow Beam Polished Alzak Auxiliary Reflector

The approximate effect produced by the various Elliptalux reflectors is shown in Figs. 1, 2, and 3 above. The actual intensities produced on the ground are shown in the charts on page 12. These charts provide a simple method of determining the number and location of floodlights to light a given area. The .25 foot candle line represents the approximate edge of the lighted area. Enough floodlights should always be used so that the beams overlap and every point receives light from more than one floodlight. Annoying shadows can be prevented by choosing enough mounting locations, so that each point receives light from more than one direction.

The large size charts to scale of ⅛ and ⅒ of an inch to the foot simplify the layout work where actual intensities at various points are desired. They can be placed under a tracing of the area to be lighted, and the intensities produced from each unit at any point can be read directly.

The intensities produced and the area lighted by the narrow beam auxiliary reflector vary so rapidly with the angle at which the reflector is tilted that the most practical method of showing it is by the tables given below, which show the light given by the auxiliary reflector only. The general illumination can be calculated from the chart in Fig. 5, and the light produced by the auxiliary reflector figured separately.

Lighting problems involving unusual conditions should be referred to the Crouse-Hinds Company, Illumination Department, where engineers experienced in every form of lighting will suggest the best solution.

The lighting of most sports areas with open floodlights has been standardized. Standard layouts are shown in Bulletin 2299.

Distribution of Narrow Beam Auxiliary Reflector Only

The narrow beam auxiliary reflector superimposes on the wide beam from the porcelain enameled reflector a narrow beam of high intensity. This reflector is adjustable vertically inside the porcelain reflector and both can be adjusted together, either horizontally or vertically. The diagram and table show the light produced by the auxiliary reflector only. This is usually adjusted to light or spot the most important areas.

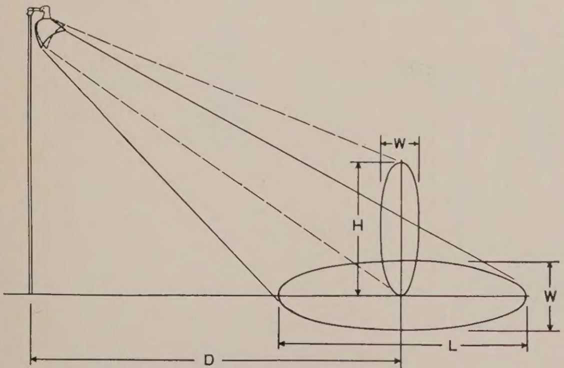


Fig. 4

Vertical Area Lighted

Distance D	Height H	Width W	Intensity Average	Intensity Maximum
30	14	17	26.6	68.
40	16	22	17.	42.
50	20	27	11.3	28.
60	23	31	8.2	20.
70	28	36	6.	15.
80	30	42	4.8	12.
90	34	47	3.8	9.2
100	38	52	2.9	7.5

Horizontal Area Lighted

Distance D	Length L	Width W	Intensity Average	Intensity Maximum
30	28	22	10.	31.8
40	48	29	4.6	16.7
50	77	38	2.2	9.6
60	125	52	1.0	5.9
70	226	70	.4	3.9

Dimensions are in Feet

Light Distribution—Type MUA Elliptalux

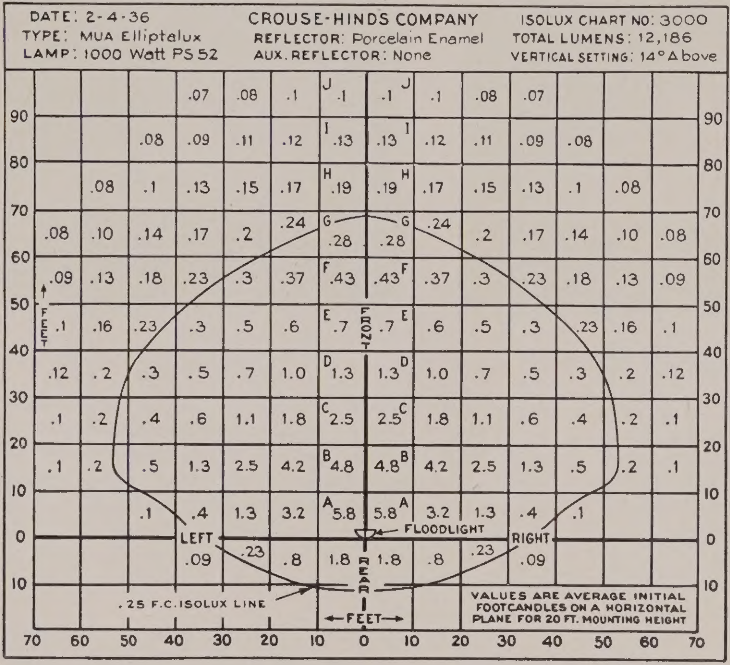


Fig. 5
Elliptalux without Auxiliary Reflector
1000-Watt Lamp

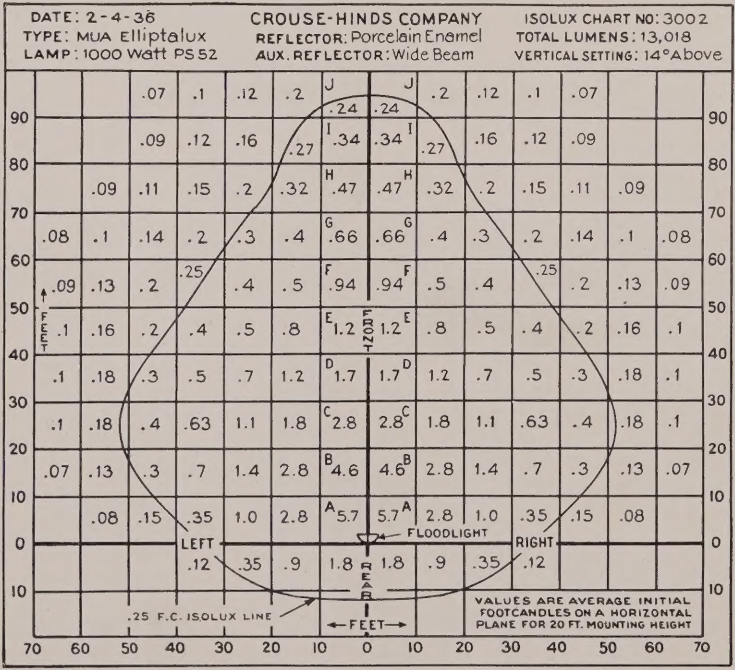


Fig. 6
Elliptalux with Wide Beam Auxiliary Reflector
1000-Watt Lamp

INTENSITIES AT OTHER MOUNTING HEIGHTS

	24 Feet High			30 Feet High		
Lamps	750 W.	1000 W.	1500 W.	750 W.	1000 W.	1500 W.
Without Auxiliary Reflector						
A	2.9	4.1	6.5	2.0	2.9	4.6
B	2.5	3.5	5.6	1.8	2.5	4.0
C	1.7	2.4	3.9	1.4	2.0	3.2
D	.89	1.3	2.0	.90	1.3	2.0
E	.53	.75	1.2	.57	.80	1.3
F	.32	.45	.72	.37	.52	.84
G	.21	.30	.48	.25	.35	.56
H	.16	.22	.35	.18	.25	.40
I	.11	.15	.24	.12	.17	.27
J	.09	.12	.19	.09	.13	.21
With Wide Beam Auxiliary Reflector						
A	2.7	3.8	6.1	2.1	2.8	4.4
B	2.5	3.5	5.6	1.8	2.4	3.9
C	1.7	2.4	3.9	1.4	1.9	3.1
D	1.1	1.5	2.4	1.0	1.4	2.3
E	.7	1.0	1.6	.57	1.0	1.6
F	.57	.8	1.3	.5	.7	1.1
G	.46	.65	1.0	.39	.55	.89
H	.35	.5	.8	.32	.45	.72
I	.28	.4	.64	.28	.4	.64
J	.21	.3	.48	.25	.35	.56

The foot candle values, in the charts at the left and the table above, are the average intensities over each 10-foot square, and are for a 1000-watt lamp mounted 20 feet high and tilted at the angle given. For 750-watt lamp, multiply by .71. For 1500-watt lamp, multiply by 1.6. For other mounting heights, see table above.

These charts are available in 8½ x 10½-inch size, and to actual scales of ⅛ and 1/10 inch to the foot.

Type MUA Floodlights—Multalux

Open Type—750 to 1500-Watt

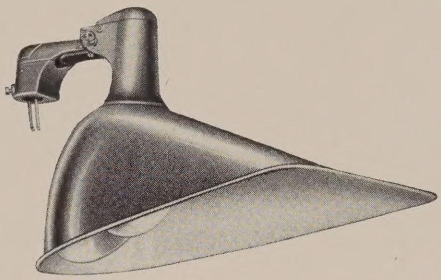


Fig. 1
Type MUA Multalux
With Slip Fitter

Crouse-Hinds type MUA Multalux floodlight is a unit of the MUA interchangeable line. The reflector is porcelain enameled, and designed especially for lighting service stations. The distribution of light from the porcelain enameled reflector is ideal for driveways, and the inner auxiliary reflectors provide a concentrated beam for the proper lighting of buildings and pumps.

Porcelain Enameled Reflector: The large porcelain enameled reflector has a double coat of white porcelain on the inside, and blue porcelain on the outside.

Wide Beam Auxiliary Reflector: The wide beam auxiliary reflector is sheet aluminum with etched Alzak finish. It superimposes on the general distribution a wide beam of higher intensity for lighting buildings and pumps. This reflector is recommended if the floodlight is mounted within 30 feet of the building.

Narrow Beam Auxiliary Reflector: The narrow beam auxiliary reflector is sheet aluminum with polished Alzak finish. See Fig. 3, page 15, for the size of the light spot at various distances.

Easy to Clean: The reflector of the Multalux floodlight is easily removed for cleaning, by simply loosening four screws and twisting the reflector.

Easy to Install: The Multalux floodlight is unusually easy to install and wire. The head and support, which weighs only 4½ lbs., can be installed and wired complete, and the reflector attached later. See wiring features on page 14 of this section.

Description		Without Auxiliary Reflector		With Wide Beam Etched Alzak Auxiliary Reflector		With Narrow Beam Polished Alzak Auxiliary Reflector	
		Cat. No.	List, each	Cat. No.	List, each	Cat. No.	List, each
MUA Multalux	With Slip Fitter	42206	$30.00	42209	$33.00	42212	$36.00
	With Cross-Arm Base . .	42207	28.00	42210	31.00	42213	34.00
	With Pole Bracket	42208	29.00	42211	32.00	42214	35.00
	With Pendent Head . . .	42387	26.00	42388	29.00	42389	32.00
	Reflector Only	HL6232	19.00	HL6233	22.00	HL6234	25.00

Head and Support Complete for MUA Multalux

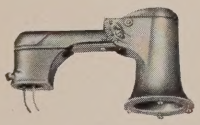


Fig. 2
Slip Fitter

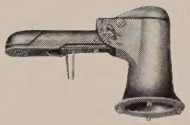


Fig. 3
Cross Arm

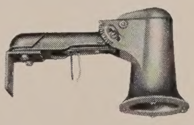


Fig. 4
Pole Bracket

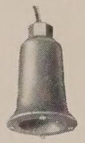


Fig. 5
Pendent Head

Description	Cat. No.	List, each
Slip Fitter	42177	$11.00
Cross Arm	42176	9.00
Pole Bracket	42178	10.00
Pendent Head	42380	7.00

Prices do not include incandescent lamps.
•Denotes illustration and price changes.

Type MUA Floodlights—Multalux

Open Type—750 to 1500-Watt

Housing: Cast aluminum alloy.

The Multalux reflector is mounted on the standard interchangeable MUA head and support. This provides mountings for any condition.

Mountings: Slip Fitter—Cast aluminum for 1½-inch pipe.

Cross-Arm Base—Provision is made for mounting this base on a cross arm or other flat surface either by a single ¾-inch bolt or lag screw or by two ¼-inch bolts or lag screws. The two ¼-inch bolts fit in slots which allow a 90° rotation of the unit. The slip-fitter mounting can quickly be converted to cross-arm mounting by removing the two screws which hold the slip fitter to the bracket arm.

Pole Bracket—A steel bracket which can be fastened to the side of a wood pole or building with ⅝-inch bolts or lag screws.

Pendent Head—A pendent head, without mounting, but with top tapped for ¾-inch conduit.

●**Wiring Features:** Two leads of asbestos insulated wire attached to the lamp receptacle, run through the hollow bracket arm, for splicing to the rubber covered service wires. The lamp receptacle is easily accessible for inspection by removing one large screw which holds the retaining cap in position. A gasket under the receptacle support plate seals the top of the head. The wiring is entirely enclosed in the slip-fitter mounting. The removable cap over the slip fitter allows plenty of room for splicing. The floodlights are furnished with a blank bakelite cover which is located under the bracket arm and has two knockouts for wire holes for open wiring. This arrangement permits easy conversion from slip-fitter mounting, with enclosed wiring, to any of the other mountings with open wiring. A ½-inch nipple cover (Cat. No. 1734) will be furnished when armored cable is used for wiring.

Lamps: 750, 1000, or 1500-watt, PS52-bulb General Lighting Service lamps, or 400-watt mercury vapor lamp. Floodlights will be furnished arranged for standard 500-watt lamps, if specified. Hard glass lamps are recommended in open units to reduce breakage from driving rain or snow.

Lamp Receptacle: The standard receptacle is porcelain Mogul screw base (Cat. No. HL5906). A 3-contact receptacle (Cat. No. HL5907) for the 3-lite type (400, 600, 1000-watt) lamp, can be furnished at $ .65, list additional.

Net Weight: 16½ lbs.

Shipping Weight: 28 lbs.

Accessories and Parts for MUA Multalux

Description	Cat. No.	List, each
Wide Beam, Etched Alzak Auxiliary Reflector with Support Bracket	HL5924	$ 3.00
Narrow Beam, Polished Alzak Auxiliary Reflector with Support Bracket	HL5925	6.00
1½-Inch Slip Fitter Only	HL5887	2.00
Pole Bracket Only	HL5888	1.00
Outside Reflector Gasket	HL6230	.20
Standard Lamp Receptacle with Leads	HL5989	1.25
3-Lite Lamp Receptacle with Adapter Plate and Leads	KL393	1.90

Prices do not include incandescent lamps. ●Denotes change in description and illustration.

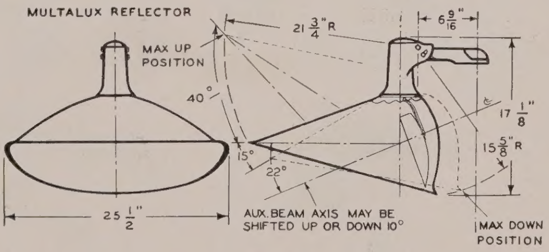


Fig. 6●
Dimensions—Type MUA Multalux
With Porcelain Enameled Reflector

Discounts: Schedule "F"

Light Distribution—Type MUA Multalux

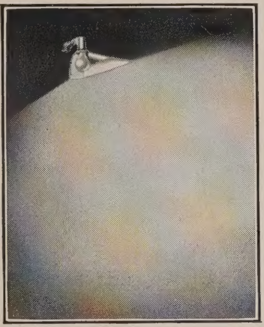


Fig. 1
Without Auxiliary Reflector

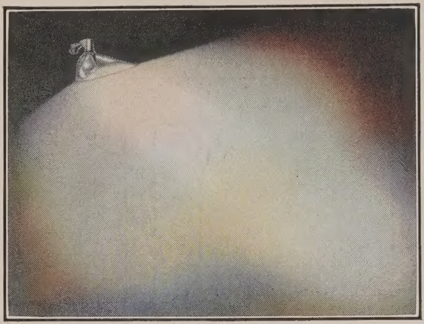


Fig. 2
With Wide Beam Etched Alzak
Auxiliary Reflector

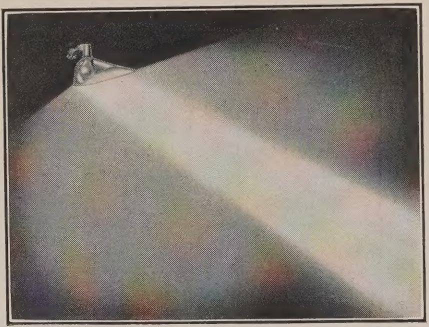


Fig. 3
With Narrow Beam Polished Alzak
Auxiliary Reflector

The approximate effect produced by the various Multalux reflectors is shown in Figs. 1, 2, and 3 above. The actual intensities produced on the ground are shown in the charts on page 16. These charts provide a simple method of determining the number and location of floodlights to light a given area. The .25 foot candle line represents the approximate edge of the lighted area. Enough floodlights should always be used so that the beams overlap and every point receives light from more than one floodlight. Annoying shadows can be prevented by choosing enough mounting locations, so that each point receives light from more than one direction.

The large size charts to scale of ⅛ and ¹⁄₁₀ of an inch to the foot simplify the layout work where actual intensities at various points are desired. They can be placed under a tracing of the area to be lighted, and the intensities produced from each unit at any point can be read directly.

The intensities produced and the area lighted by the narrow beam auxiliary reflector vary so rapidly with the angle at which the reflector is tilted that the most practical method of showing it is by the tables given below, which show the light given by the auxiliary reflector only. The general illumination can be calculated from the chart in Fig. 5, and the light produced by the auxiliary reflector figured separately.

Lighting problems involving unusual conditions should be referred to the Crouse-Hinds Company, Illumination Department, where engineers experienced in every form of lighting will suggest the best solution.

The lighting of most sports areas with open floodlights has been standardized. Standard layouts are shown in Bulletin 2299.

Distribution of Narrow Beam Auxiliary Reflector Only

The narrow beam auxiliary reflector superimposes on the wide beam from the porcelain enameled reflector a narrow beam of high intensity. This reflector is adjustable vertically inside the porcelain reflector and both can be adjusted together, either horizontally or vertically. The diagram and table show the light produced by the auxiliary reflector only. This is usually adjusted to light the building or to spot the pumps.

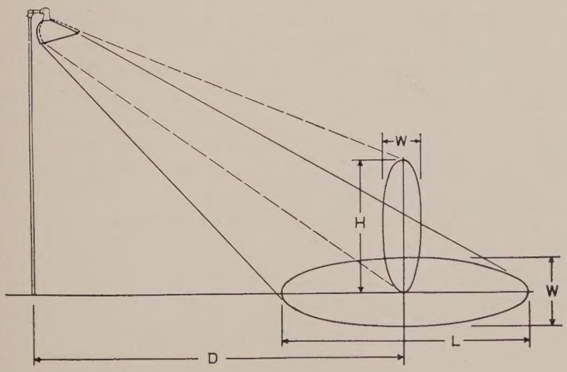


Fig. 4

Vertical Area Lighted

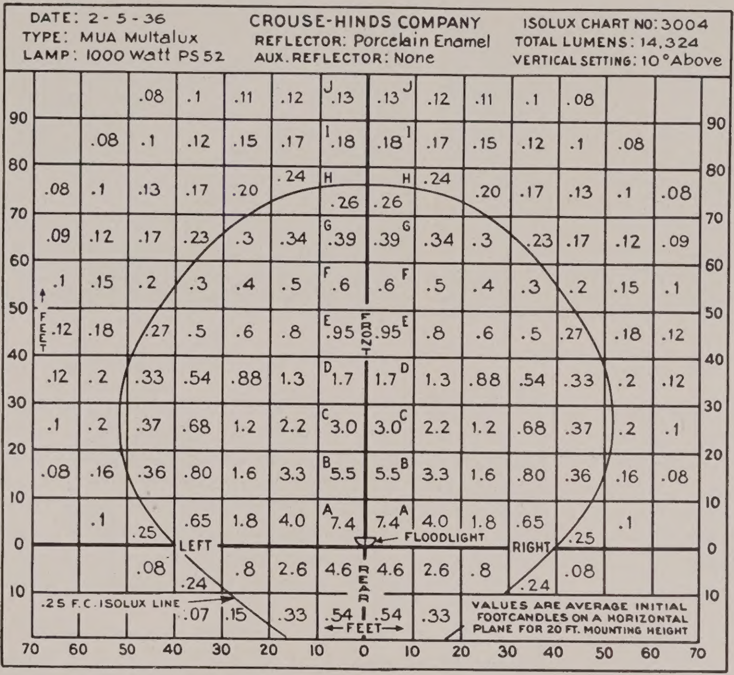
Distance D	Height H	Width W	Intensity	
			Average	Maximum
30	14	17	26.6	68.
40	16	22	17.	42.
50	20	27	11.3	28.
60	23	31	8.2	20.
70	28	36	6.	15.
80	30	42	4.8	12.
90	34	47	3.8	9.2
100	38	52	2.9	7.5

Horizontal Area Lighted

Distance D	Length L	Width W	Intensity	
			Average	Maximum
30	28	22	10.	31.8
40	48	29	4.6	16.7
50	77	38	2.2	9.6
60	125	52	1.0	5.9
70	226	70	.4	3.9

Dimensions are in Feet

Light Distribution—Type MUA Multalux



DATE: 2-5-36
TYPE: MUA Multalux
LAMP: 1000 Watt PS 52

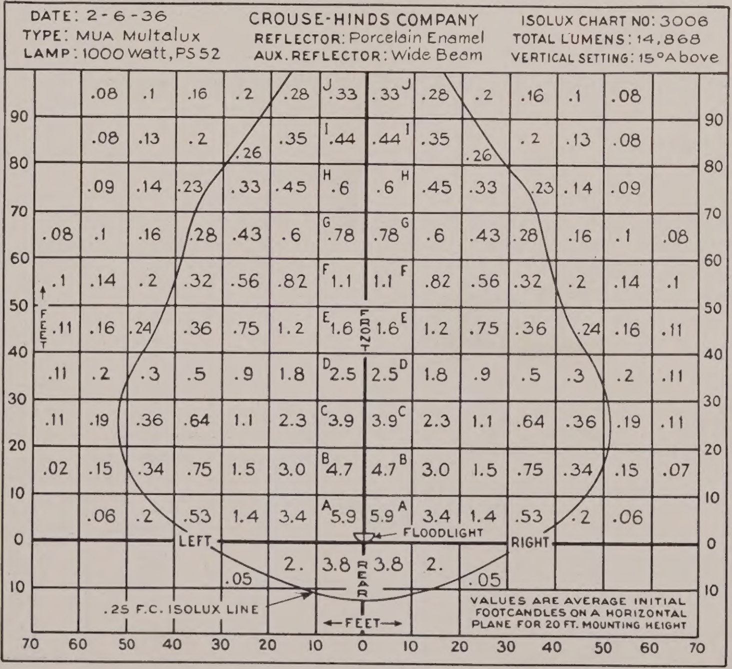
CROUSE-HINDS COMPANY
REFLECTOR: Porcelain Enamel
AUX. REFLECTOR: None

ISOLUX CHART NO: 3004
TOTAL LUMENS: 14,324
VERTICAL SETTING: 10° Above

		.08	.1	.11	.12	J .13	.13 J	.12	.11	.1	.08		
	.08	.1	.12	.15	.17	I .18	.18 I	.17	.15	.12	.1	.08	
.08	.1	.13	.17	.20	.24	H .26	.26 H	.24	.20	.17	.13	.1	.08
.09	.12	.17	.23	.3	.34	G .39	.39 G	.34	.3	.23	.17	.12	.09
.1	.15	.2	.3	.4	.5	F .6	.6 F	.5	.4	.3	.2	.15	.1
.12	.18	.27	.5	.6	.8	E .95	.95 E	.8	.6	.5	.27	.18	.12
.12	.2	.33	.54	.88	1.3	D 1.7	1.7 D	1.3	.88	.54	.33	.2	.12
.1	.2	.37	.68	1.2	2.2	C 3.0	3.0 C	2.2	1.2	.68	.37	.2	.1
.08	.16	.36	.80	1.6	3.3	B 5.5	5.5 B	3.3	1.6	.80	.36	.16	.08
	.1	.25	.65	1.8	4.0	A 7.4	7.4 A	4.0	1.8	.65	.25	.1	
		.08	.24	.8	2.6	4.6	4.6	2.6	.8	.24	.08		
			.07	.15	.33	.54	.54	.33					

90
80
70
60
50
40
30
20
10
0
10
70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
FEET
FRONT
REAR
LEFT
RIGHT
FLOODLIGHT
.25 F.C. ISOLUX LINE
FEET
VALUES ARE AVERAGE INITIAL FOOTCANDLES ON A HORIZONTAL PLANE FOR 20 FT. MOUNTING HEIGHT

Fig. 5
Multalux without Auxiliary Reflector
1000-Watt Lamp



DATE: 2-6-36
TYPE: MUA Multalux
LAMP: 1000 Watt, PS 52

CROUSE-HINDS COMPANY
REFLECTOR: Porcelain Enamel
AUX. REFLECTOR: Wide Beam

ISOLUX CHART NO: 3006
TOTAL LUMENS: 14,868
VERTICAL SETTING: 15° Above

	.08	.1	.16	.2	.28	J .33	.33 J	.28	.2	.16	.1	.08	
	.08	.13	.2	.26	.35	I .44	.44 I	.35	.26	.2	.13	.08	
	.09	.14	.23	.33	.45	H .6	.6 H	.45	.33	.23	.14	.09	
.08	.1	.16	.28	.43	.6	G .78	.78 G	.6	.43	.28	.16	.1	.08
.1	.14	.2	.32	.56	.82	F 1.1	1.1 F	.82	.56	.32	.2	.14	.1
.11	.16	.24	.36	.75	1.2	E 1.6	1.6 E	1.2	.75	.36	.24	.16	.11
.11	.2	.3	.5	.9	1.8	D 2.5	2.5 D	1.8	.9	.5	.3	.2	.11
.11	.19	.36	.64	1.1	2.3	C 3.9	3.9 C	2.3	1.1	.64	.36	.19	.11
.02	.15	.34	.75	1.5	3.0	B 4.7	4.7 B	3.0	1.5	.75	.34	.15	.07
	.06	.2	.53	1.4	3.4	A 5.9	5.9 A	3.4	1.4	.53	.2	.06	
				.05	2.	3.8	3.8	2.	.05				

90
80
70
60
50
40
30
20
10
0
10
70 60 50 40 30 20 10 0 10 20 30 40 50 60 70
FEET
FRONT
REAR
LEFT
RIGHT
FLOODLIGHT
.25 F.C. ISOLUX LINE
FEET
VALUES ARE AVERAGE INITIAL FOOTCANDLES ON A HORIZONTAL PLANE FOR 20 FT. MOUNTING HEIGHT

Fig. 6
Multalux with Wide Beam Auxiliary Reflector
1000-Watt Lamp

INTENSITIES AT OTHER MOUNTING HEIGHTS

Lamps	24 Feet High 750 W.	24 Feet High 1000 W.	24 Feet High 1500 W.	30 Feet High 750 W.	30 Feet High 1000 W.	30 Feet High 1500 W.
Without Auxiliary Reflector						
A	3.7	5.2	8.3	2.4	3.4	5.5
B	3.0	4.2	6.8	2.1	3.0	4.8
C	1.9	2.7	4.3	1.6	2.3	3.6
D	1.2	1.6	2.6	1.1	1.5	2.4
E	.71	1.0	1.6	.71	1.0	1.6
F	.46	.62	1.0	.47	.68	1.1
G	.30	.43	.69	.35	.49	.79
H	.27	.30	.42	.25	.35	.56
I	.16	.22	.35	.18	.26	.42
J	.11	.15	.24	.12	.17	.27
With Wide Beam Auxiliary Reflector						
A	3.1	4.4	7.0	2.1	2.9	4.67
B	2.7	3.8	6.0	2.0	2.8	4.5
C	2.3	3.2	5.2	1.8	2.5	4.1
D	1.8	2.5	4.0	1.5	2.1	3.4
E	1.2	1.7	2.7	1.1	1.6	2.6
F	.82	1.2	1.9	.85	1.2	1.9
G	.65	.92	1.5	.68	.95	1.5
H	.49	.7	1.1	.53	.75	1.2
I	.37	.52	.84	.43	.60	1.0
J	.28	.4	.64	.32	.45	.7

The foot candle values, in the charts at the left and the table above, are the average intensities over each 10-foot square, and are for a 1000-watt lamp mounted 20 feet high and tilted at the angle given. For 750-watt lamp, multiply by .71. For 1500-watt lamp, multiply by 1.6. For other mounting heights, see table above.

These charts are available in 8½ x 10½-inch size, and to actual scales of ⅛ and ⅒ inch to the foot.

Type MPA-2 Floodlights

Two-Lamp, Open Type—1500 to 4000-Watt

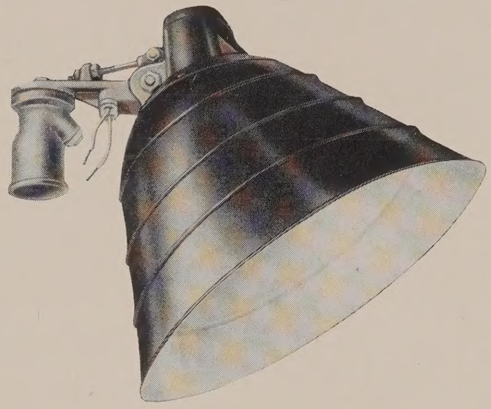


Fig. 1
Type MPA-2 with Slip Fitter

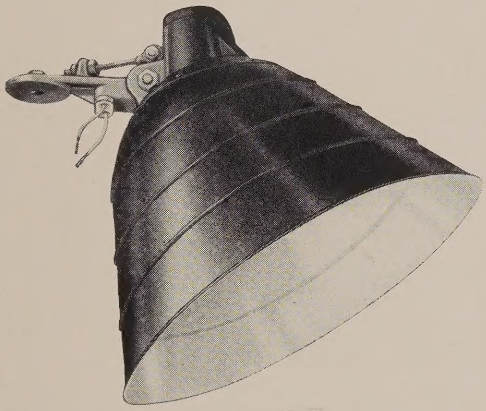


Fig. 2
Type MPA-2 with Cross-Arm Base

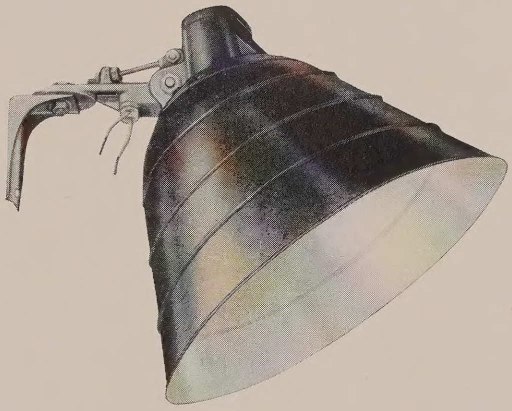


Fig. 3
Type MPA-2 with Pole Bracket

Type MPA-2 is a two-lamp, open type floodlight with porcelain enameled steel reflector. It is particularly adaptable to the lighting of baseball parks, football fields, swimming pools and playgrounds. Its size, shape and reflecting surface combine to make it an unusually efficient unit.

The three methods of mounting this floodlight meet every installation requirement. It can be mounted on wood poles, steel poles, cross arms, steel towers, or on the sides of buildings. One of the three bases or brackets will provide a convenient means of installation under any condition.

The vertical adjustment of type MPA-2 floodlight has been designed to assure accuracy and rigidity. The locking bolt provides a fine screw thread adjustment which allows the cut-off point of the beam to be set accurately at any point and locked in that position.

Crouse-Hinds engineers will furnish complete recommendations for any floodlighting installation. Detailed sketches of the area to be lighted should accompany all requests for this service.

Description		Cat. No.	List, each
MPA-2	With Cross-Arm Base	41696	$57.00●
	With 2½-Inch Slip Fitter	41697	59.00●
	With Pole Bracket	41698	58.00●

Prices do not include incandescent lamps. ●Denotes price change.

Discounts: Schedule "F"

Type MPA-2 Floodlights

Two-Lamp, Open Type—1500 to 4000-Watt

Lamp Housing: Cast aluminum alloy. The lamp receptacles are fastened to the cast aluminum cap which forms the top of the lamp housing. This provides easy access to the receptacles and wiring.

Reflector: The 30-inch reflector is of copper-bearing steel with a three-layer mat white porcelain enamel finish on the inside and a blue porcelain enamel finish on the outside. The reflecting surface is not affected by weather conditions and can easily be cleaned with soap and water.

Mountings: Cross-Arm Base—The mounting bracket of cast Feraloy terminates in a round plate with a hole for a ½-inch bolt in the center and a cast quadrant slot. The bracket can be bolted to a wood or steel cross arm.

Slip Fitter—For 2½-inch pipe. Furnished with a wire outlet so that wires can be brought up through the steel pole and out at the slip fitter. The slip fitter is attached to the standard bracket with two ½-inch cap screws which are furnished with it.

Pole Bracket—¼-inch pressed steel, formed to fit the pole. It is attached to the standard bracket with two ½-inch bolts which are furnished with it. The bracket is attached to the wood pole with two ⅝-inch bolts or lag screws.

Lamp Receptacles: Two Mogul screw base skeleton receptacles (Cat. No. HL7012).

Wiring Connections: Three asbestos wrapped wire leads are attached to the lamp receptacles, one wire being common. They run through the hollow bracket arm and are long enough to permit splicing to rubber covered wire. It is recommended that a 3-wire circuit be run to each floodlight. The rubber covered wire enters the arm through a 3-wire porcelain cover (Cat. No. 173). Any other ½-inch Obround Condulet cover can be furnished, if specified on the order.

Lamps: Two 750, 1000, 1500, or 2000-watt, PS52-bulb, General Lighting Service lamps (lamps are not included in the price of the floodlight). Hard glass lamps will reduce breakage caused by driving rain or snow.

Net Weights: Cross-Arm Mounting, 32 lbs. Slip-Fitter Mounting, 40 lbs. Pole-Bracket Mounting, 38 lbs.

Shipping Weights: Cross-Arm Mounting, 47 lbs. Slip-Fitter Mounting, 55 lbs. Pole-Bracket Mounting, 53 lbs.

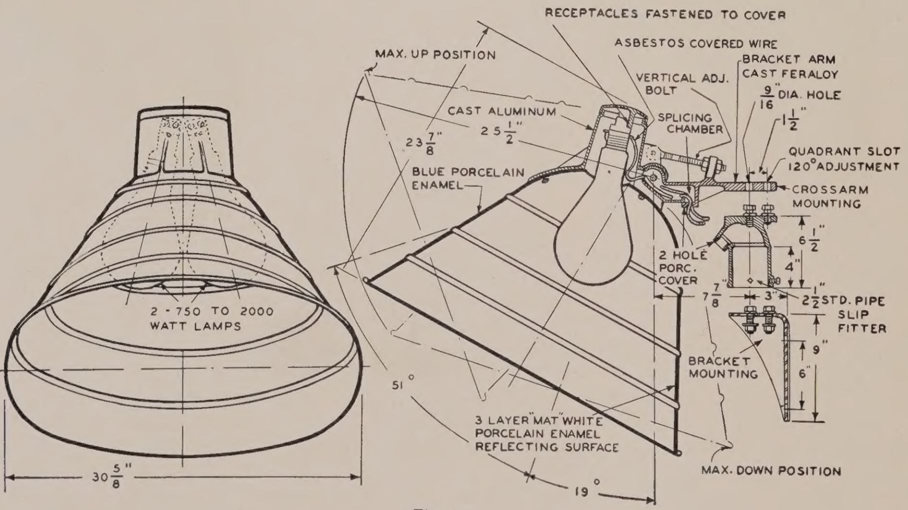

RECEPTACLES FASTENED TO COVER
ASBESTOS COVERED WIRE
MAX. UP POSITION
BRACKET ARM CAST FERALOY
VERTICAL ADJ. BOLT
9/16" DIA. HOLE
CAST ALUMINUM
25 1/2"
SPLICING CHAMBER
1 1/2"
23 7/8"
QUADRANT SLOT 120° ADJUSTMENT
BLUE PORCELAIN ENAMEL
CROSSARM MOUNTING
6 1/2"
2 HOLE PORC. COVER
4"
7 7/8"
3"
2 1/2" STD. PIPE SLIP FITTER
2 - 750 TO 2000 WATT LAMPS
9"
BRACKET MOUNTING
6"
51°
3 LAYER "MAT" WHITE PORCELAIN ENAMEL REFLECTING SURFACE
MAX. DOWN POSITION
30 5/8"
19°

Fig. 4
Dimensions and Construction Details—Type MPA-2

Type VCD-12 Lighting Units

For Roadway Lighting

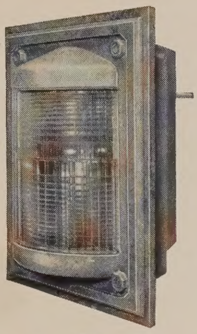


Fig. 1
Type VCD-12

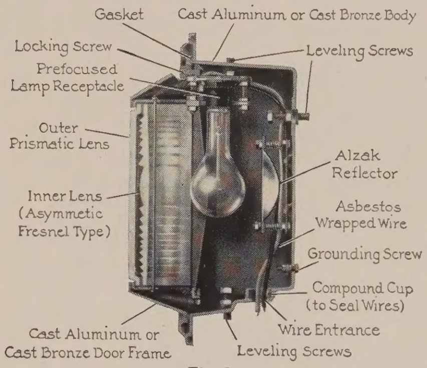

Gasket
Cast Aluminum or Cast Bronze Body
Locking Screw
Leveling Screws
Prefocused Lamp Receptacle
Outer Prismatic Lens
Alzak Reflector
Inner Lens (Asymmetic Fresnel Type)
Asbestos Wrapped Wire
Grounding Screw
Compound Cup (to Seal Wires)
Wire Entrance
Cast Aluminum or Cast Bronze Door Frame
Leveling Screws

Fig. 2
Type VCD-12—Sectional View

Type VCD-12 lighting units were developed for the illumination of viaducts, bridges, tunnels, and areas of a similar nature where it is desirable to light an area, such as a roadway by means of low mounted units which confine the light to the roadway and give no glare to either pedestrians or motorists.

This method of lighting roadways is a remarkable advance over the old style of street lighting practice both from the standpoint of efficiency and results obtained. The usual forms of ornamental street lighting with units mounted on poles, direct only a small fraction of their light onto the roadway; and fog, rain, or snowstorms absorb the majority of the light and allow practically none to reach the roadway.

Type VCD-12 units concentrate the light into a beam of narrow vertical divergence and the entire beam falls on the road. Fog and storms have little effect on the lighting as the units are mounted so close to the ground that the roadway is always sharply defined. There is no glare from type VCD-12 units as the beam is confined below the eye level of both motorists and pedestrians. There are no shadows cast by moving vehicles as the beams overlap to such an extent that every spot on the roadway is lighted from several directions.

These lighting units simplify maintenance. They are mounted low enough to be easily accessible, and yet, on account of the locking screws, cannot be tampered with by unauthorized persons. The focusing of lamps is entirely eliminated by the use of prefocused receptacles; each unit is accurately focused at the factory and the receptacle locked in position. This insures the unit operating at maximum efficiency at all times and makes lamp replacements simple.

Type VCD-12 is designed to be mounted in a concrete wall or balustrade, and is of an ornamental design.

Description		Cat. No.	List, each
VCD-12	With Cast Bronze Housing . . .	41335	$125.00
	With Cast Aluminum Housing . .	41398	95.00

Prices do not include incandescent lamps.

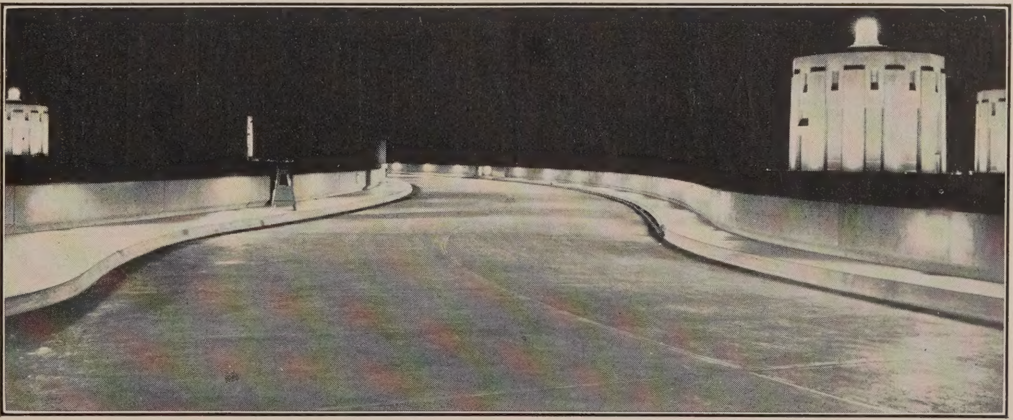


Fig. 3
Main Roadway Across Boulder Dam Lighted with Type VCD-12

Type VCD-12 Lighting Units

For Roadway Lighting

Housing: Cast bronze or cast aluminum, dust-tight and weatherproof.

Optical System: Consists of a set of doublet lenses and a spherical reflector. The doublet lenses are designed to give a horizontal distribution of light of approximately 180°. The spread of the main beam has been purposely kept below 180° so that no glare is thrown down the roadway. The auxiliary beam is approximately 180°, and lights the sidewalk and the near side of the roadway. No light is projected above the horizontal axis. The unit is designed to give an even illumination on the lighted surface from the horizon to the point immediately below the unit.

Installation: See Fig. 4 below. The unit is designed for mounting in a pocket in the wall and is furnished with leveling screws at the top, bottom, and back. A single anchor bolt holds the unit firmly to the back of the recess. For most roadways, the center of the unit should be mounted two feet above the road level.

Lamp Receptacle: Medium prefocus. Lamp receptacles are focused at the factory (Cat. No. HL3727).

Wiring Connections: A 1-inch opening is provided on the bottom of the housing. On the inside of the opening is a compound cup for sealing the outlet after the wiring is completed.

Door Frame: Cast bronze or cast aluminum. A gasket is provided between the door and housing.

Door Locking Device: Locking screws are furnished which require special keys, thereby making the entrance to the unit by unauthorized persons impossible.

Hinges: Three hinges, concealed.

Lamps: 200-watt, PS30-bulb, 115-volt, medium prefocus base; or 500-watt, G40-bulb, 115-volt Mogul prefocus base lamps. Lamps to be used must be specified when ordering.

Finish: Concealed portions of case, natural bronze or aluminum; exposed parts of case and door frame, mottled green on cast bronze units and standard aluminum on aluminum units. Special finishes to comply with architecture of installation can be furnished, if desired.

Net Weights: Cast bronze, 90 lbs. Cast aluminum, 60 lbs.

Shipping Weights: Cast bronze, 115 lbs. Cast aluminum, 85 lbs.

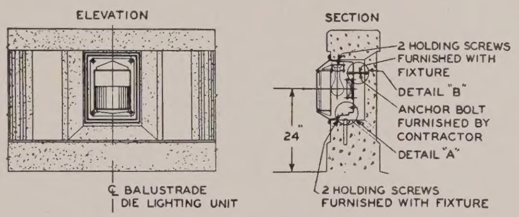

ELEVATION
℄ BALUSTRADE
| DIE LIGHTING UNIT
SECTION
2 HOLDING SCREWS FURNISHED WITH FIXTURE
DETAIL "B"
ANCHOR BOLT FURNISHED BY CONTRACTOR
DETAIL "A"
24"
2 HOLDING SCREWS FURNISHED WITH FIXTURE

Fig. 4
Installation Details

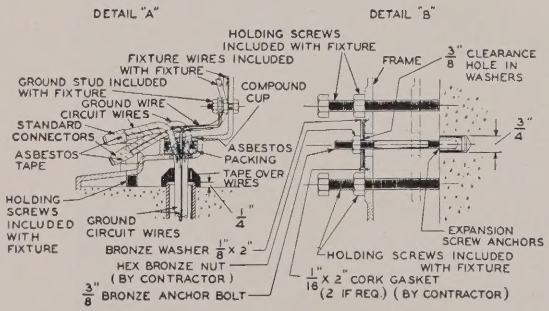

DETAIL "A"
DETAIL "B"
HOLDING SCREWS INCLUDED WITH FIXTURE
FIXTURE WIRES INCLUDED WITH FIXTURE
GROUND STUD INCLUDED WITH FIXTURE
GROUND WIRE
CIRCUIT WIRES
STANDARD CONNECTORS
ASBESTOS TAPE
COMPOUND CUP
ASBESTOS PACKING
TAPE OVER WIRES
1/4"
HOLDING SCREWS INCLUDED WITH FIXTURE
GROUND CIRCUIT WIRES
BRONZE WASHER 1/8" x 2"
HEX BRONZE NUT (BY CONTRACTOR)
3/8" BRONZE ANCHOR BOLT
FRAME
3/8" CLEARANCE HOLE IN WASHERS
3/4"
EXPANSION SCREW ANCHORS
HOLDING SCREWS INCLUDED WITH FIXTURE
1/16" X 2" CORK GASKET (2 IF REQ.) (BY CONTRACTOR)

Fig. 5
Installation Details

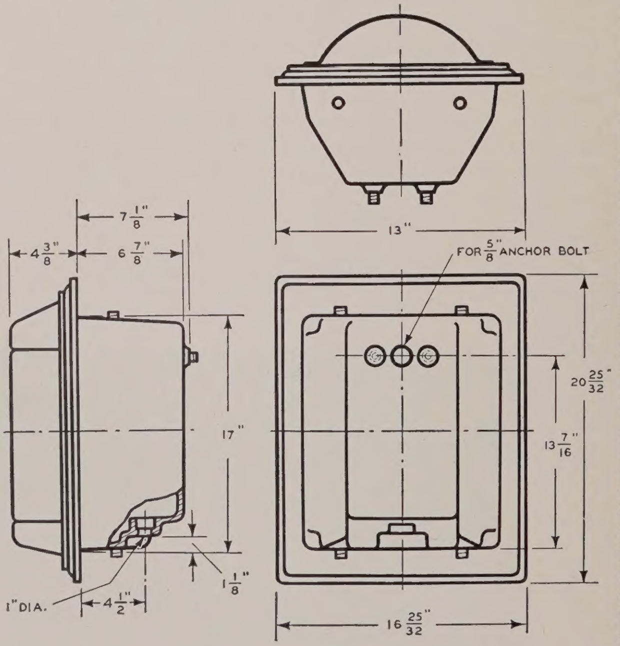

7 1/8"
4 3/8"
6 7/8"
17"
1 1/8"
1" DIA.
4 1/2"
13"
FOR 5/8" ANCHOR BOLT
20 25/32"
13 7/16"
16 25/32"

Fig. 6
Dimensions—Type VCD-12

Type VCD-6 Lighting Units

For Roadway Lighting

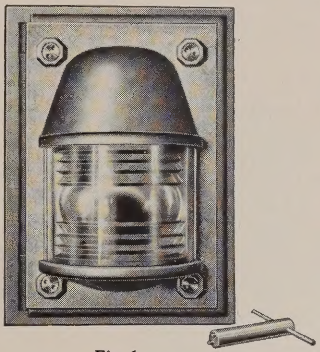


Fig. 1
Type VCD-6

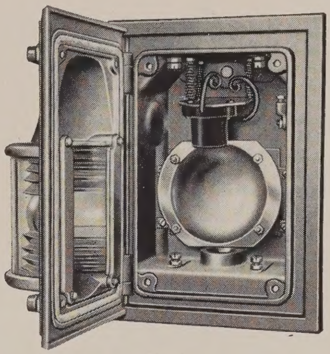


Fig. 2
Type VCD-6—With Door Open

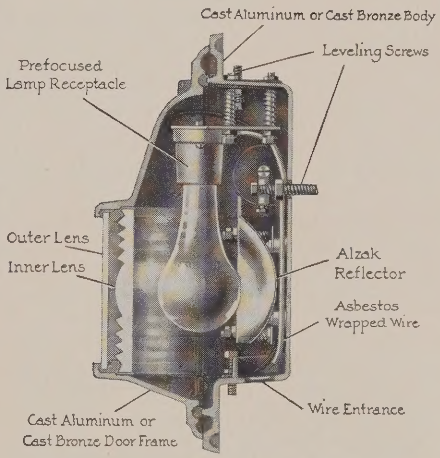

Cast Aluminum or Cast Bronze Body
Leveling Screws
Prefocused Lamp Receptacle
Outer Lens
Inner Lens
Alzak Reflector
Asbestos Wrapped Wire
Wire Entrance
Cast Aluminum or Cast Bronze Door Frame

Fig. 3
Type VCD-6—Sectional View

Type VCD-6 is a lighting unit similar to type VCD-12 except smaller in size, and designed for lighting narrower roadways and areas. The beam of light can be raised or lowered by raising or lowering the lamp. Prefocus base lamps are recommended. When these lamps are used, the lighting units are focused at the factory to give the most satisfactory lighting for the mounting height and width of roadway on which they are to be used. This simplifies maintenance and insures operation at maximum efficiency at all times.

Type VCD-6 units concentrate the light into a beam of narrow vertical divergence and the entire beam falls on the road. Fog and storms have little effect on the lighting as the units are mounted so close to the ground that the roadway is always sharply defined. There is no glare from type VCD-6 units as the beam is confined below the eye level of both motorists and pedestrians. There are no shadows cast by moving vehicles as the beams overlap to such an extent that every spot on the roadway is lighted from several directions.

Description		Housing and Door	Cat. No.	List, each
VCD-6	60-watt	Bronze	42747	$55.00
	100-watt	Bronze	42748	55.00
	60-watt	Aluminum	42204	45.00
	100-watt	Aluminum	42205	45.00

Prices do not include incandescent lamps.

Discounts: Schedule "F"

Type VCD-6 Lighting Units

For Roadway Lighting

Housing: Cast bronze or cast aluminum, dust-tight and weatherproof.

Optical System: Consists of special prismatic lens and an Alzak spherical reflector. A smooth outer glass is used in front of the prismatic lens in order to facilitate maintenance and maintain the efficiency of the unit. The optical system is designed and adjusted to provide a horizontal beam spread of 180°. The optical system is so focused that the top of the beam does not project above the horizontal.

Installation: The unit is designed for mounting in a pocket in the wall and is furnished with leveling screws at the top, bottom, and back. A single anchor bolt holds the unit firmly to the back of the recess.

Lamp Receptacle: Medium prefocus, adjusted for 60 or 100-watt lamp, as ordered (Cat. No. HL3727).

Wiring Connections: A 1-inch opening is provided in the bottom of the housing. On the inside of the opening is a compound cup for sealing the outlet after the wiring is completed.

Door Frame: Cast bronze or cast aluminum. A gasket is provided between the door and the housing.

Door Locking Screw: Locking screws requiring special keys are furnished as standard equipment.

Hinges: Two hinges, concealed.

Lamps: 60-watt, A21-bulb, 115-volt, clear bulb lamps with medium prefocus base; or 100-watt, A23-bulb, 115-volt lamp with clear bulb and medium prefocus base. Lamps to be used must be specified on order.

Finish: Concealed portions of case, natural bronze or aluminum; exposed parts of case and door frame, mottled green on cast bronze units and standard aluminum on aluminum units. Special finishes to comply with architecture of installation can be furnished, if desired.

Net Weights: Cast bronze, 30 lbs. Cast aluminum, 15 lbs.

Shipping Weights: Cast bronze, 38 lbs. Cast aluminum, 22 lbs.

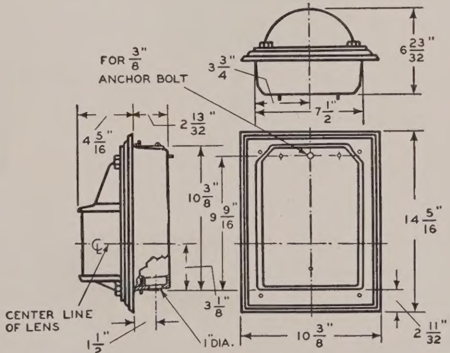


Fig. 4
Dimensions—Type VCD-6

Type GCP-14 Lantern Floodlights

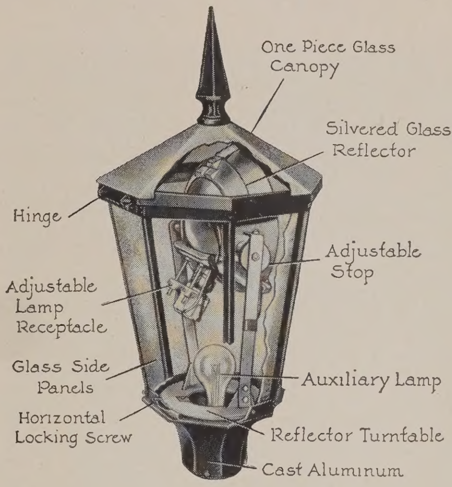


Fig. 1
Type GCP-14 with Reflector Set
To Project Light Horizontally
(Note adjustable stop)

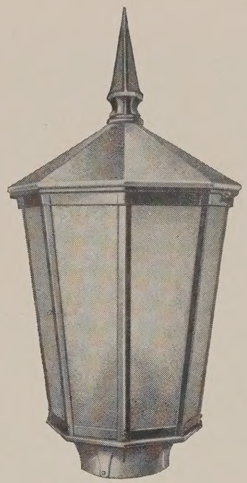


Fig. 2
Type GCP-14
With 7-Inch Slip Fitter

Type GCP-14 is an ornamental lantern type floodlight designed for the illumination of buildings, gasoline service stations, and other subjects where the appearance of the lighting unit is a factor of importance. The daytime appearance is that of an ornamental street lantern. At night the large, efficient reflector on the inside transforms it into a powerful floodlight.

Type GCP-14 provides a wide and very uniform beam of light. The reflector is of unusually efficient design, since it first concentrates the light so that it all passes through one glass panel, and then spreads it. This prevents any light being absorbed by the ribs as it is with any ordinary reflector. See Fig. 4 on the next page.

Type GCP-14 lantern is listed in three ways. **Form A** is for use in lighting buildings or other subjects where the beam is directed above the horizontal. Sufficient light is reflected below horizontal with this type to illuminate the lower portion of buildings. This type has a heat-resisting top canopy. A horizontal adjustment of 45° is provided so that the beam can be turned to strike the building at an angle, and still have one side of the lantern parallel with the building. Fig. 1 shows the set screws which lock this adjustment. They are controlled from the outside of the housing. **Form B** lantern is furnished with one side panel of heat-resisting glass. The beam passes through this panel, and the horizontal adjustment of the reflector is locked. This type is intended for lighting ground areas and low buildings, such as gasoline service stations. **Form C** has a narrow beam reflector for lighting high buildings or for other long range projection.

Description		Style Reflector	Cast Aluminum			Cast Feraloy		
			With 4-Inch Slip Fitter Cat. No.	With 7-Inch Slip Fitter Cat. No.	List, each	With 4-Inch Slip Fitter Cat. No.	With 7-Inch Slip Fitter Cat. No.	List, each
GCP-14	**With Floodlighting Reflector**							
	Form A—For Lighting above Horizontal	Wide Beam	41322	41323	$91.00	41970	41971	$76.00
	Form B—For Lighting below Horizontal	Wide Beam	41324	41325	91.00	41972	41973	76.00
	Form C	Narrow Beam	41402	41401	91.00	41974	41975	76.00
	Without Reflector							
	With Mogul Multiple Receptacle		41337	41338	On Request	41976	41977	On Request
	With Series Film Cutout Receptacle		41320	41321		41978	41979	

Prices do not include incandescent lamps.

The above lanterns with floodlighting reflector include a medium screw base auxiliary lamp receptacle. If this receptacle is not desired, $1.50 can be deducted from the list prices.

Discounts: Schedule "F"

Type GCP-14 Lantern Floodlights

Lantern: The frame is made of cast aluminum alloy or cast Feraloy.

Reflector: 14-inch, hammered mirrored glass, wide beam (Cat. No. HL3862). A narrow beam parabolic reflector can also be furnished for the lighting of high buildings (Cat. No. HL4250).

Mountings: Slip fitter for 4-inch pipe or 7-inch ornamental pole top. An adapter can be supplied for 4-inch slip fitter to take 2½-inch pipe (Cat. No. HL3877), without extra charge.

Relamping: Type GCP-14 lantern is provided with a simple adjustable stop. When the best reflector position has once been determined, it is locked in position. A spring plunger holds the reflector in position and it can easily be tipped over without the use of tools. When the reflector is tipped back after relamping, the plunger snaps into place and the reflector is in its exact original position. This feature saves considerable maintenance expense.

Glass Panels: Eight diffusing glass panels (Cat. Nos. Non-Heat-Resisting, HL4093; Heat-Resisting, HL3866). Prices on application.

Glass Canopy: One piece of octagonal diffusing glass (Cat. Nos. Heat-Resisting, HL3867 for Form A; Non-Heat-Resisting, HL4094 for Form B). A solid metal canopy will be furnished, if specified. Prices on application.

Lamp Receptacles: Main Floodlight — porcelain Mogul screw base (Cat. Nos. HL2128, for wide beam reflector; HL8751, for narrow beam reflector). Auxiliary Lamp—porcelain medium screw base (Cat. No. HL6019). Unit Without Reflector—Mogul screw base or series film cutout.

Wiring Connections: Two leads of asbestos-wrapped wire are connected to the lamp receptacle and extend one foot through the bottom of the lantern.

Hinged Top: The top of the lantern is hinged for convenience in relamping.

Lamps: Main Floodlight—With Wide Beam Reflector, 300 to 1500-watt, PS-bulb lamps; Narrow Beam Reflector, 300 to 1500-watt, PS-bulb lamps, or 1000 or 1500-watt, G-bulb lamps. GCP-14 can be furnished for use with 500-watt, G40-bulb lamp, if specified on the order. For units already installed, an HL3252 adapter can be furnished for 500-watt, G40-bulb lamp.

Auxiliary Lamp—Any medium screw base lamp up to 200-watt, PS-30 bulb.

Unit Without Reflector—Any Mogul base lamp.

Finish: Metal portions are painted green on the outside.

Net Weights: Cast Aluminum—55 lbs. Cast Feraloy—88 lbs.

Shipping Weights: Cast Aluminum—120 lbs. Cast Feraloy—153 lbs.

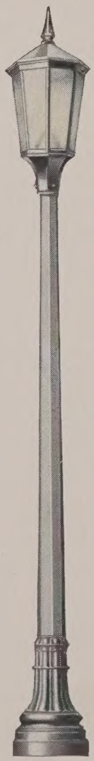


Fig. 3
Type GCP-14—Single Mounted on Ornamental Pole

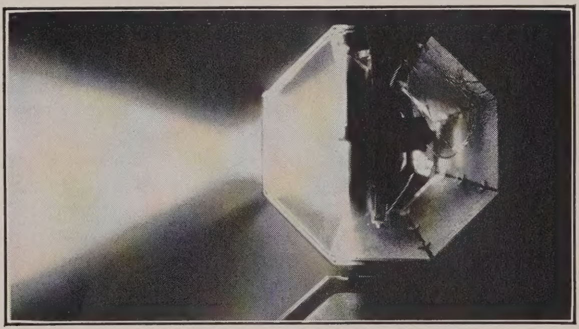


Fig. 4
Actual Photograph of Beam from GCP-14 Lantern—Top View
(Note that the reflector concentrates the light through one panel, then spreads it. There is no absorption by ribs or frame.)

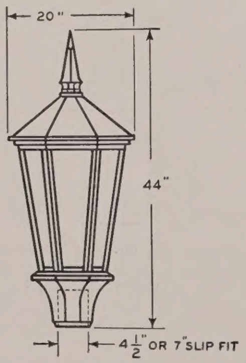


Fig. 5
Dimensions—Type GCP-14

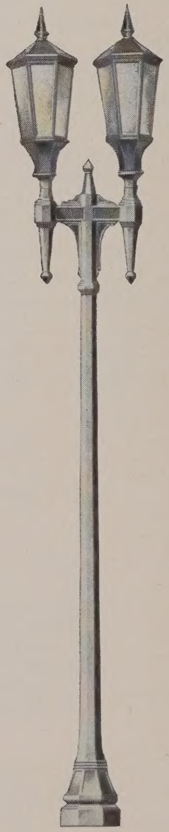


Fig. 6
Type GCP-14—Double Mounted on Ornamental Pole

Type RCD-8 Lighting Units

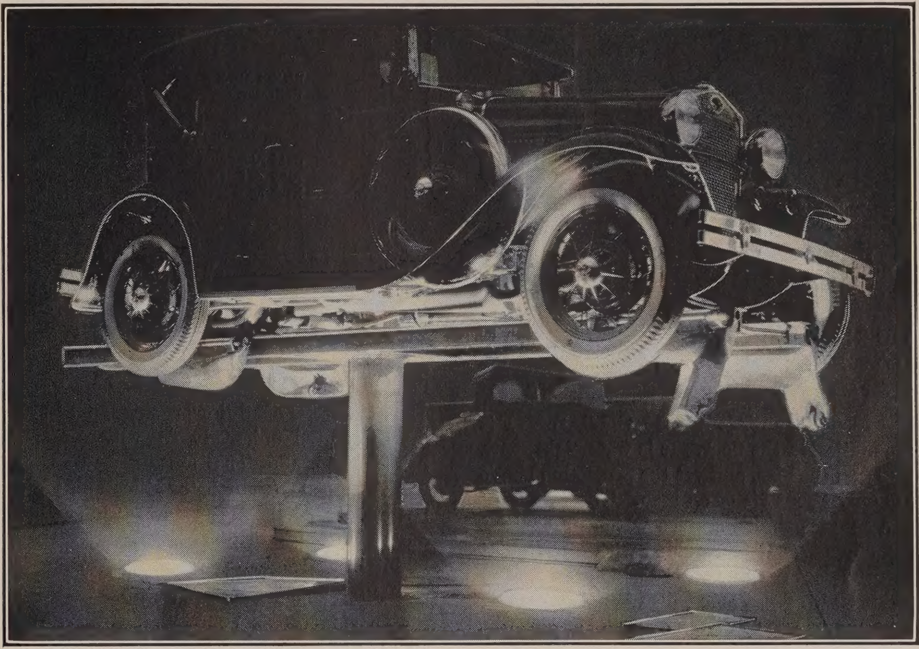


Fig. 1
Installation—Type RCD-8, Illuminating Automobile Lift

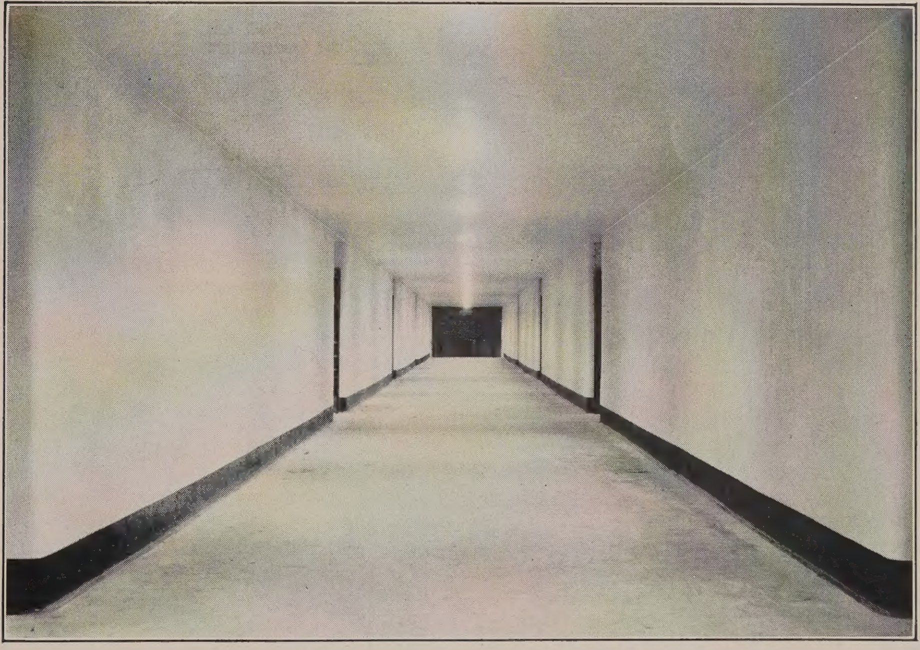


Fig. 2
Installation—Type RCD-8, Illuminating Tunnel

Type RCD-8 Lighting Units

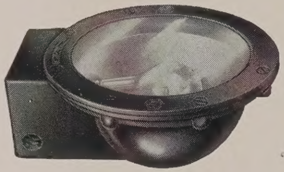


Fig. 3
Type RCD-8—Form F
Floor Mounting

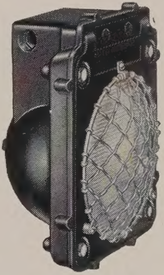


Fig. 4
Type RCD-8—Form W
Wall Mounting with
Hinged Door and Grid

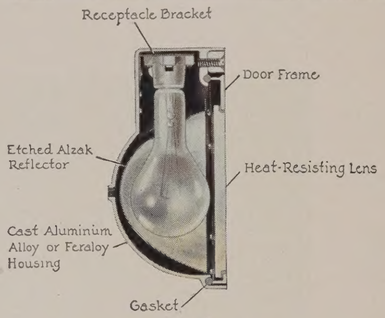


Fig. 5
Type RCD-8—Form W
Sectional View

Type RCD-8 lighting unit is designed for mounting in concrete. It is made in two styles: one for floor mounting and the other for wall mounting.

Form F for Floor Mounting: Type RCD-8, Form F is designed for mounting in the floor. It is watertight, with a door that overlaps the case, and yet the projection above the concrete is only about 3/16 of an inch. The surface of the door has a rough pebbled surface which prevents it from becoming slippery. It is provided with a wide, flat gasket between the door and the case.

It is provided with a flat lens which is heavy enough to allow it to be stepped on or driven over and offers great resistance to tools or other articles that might be dropped on it. It can also be furnished with a type of glass lens which has been heat treated to increase its resistance both to impact and to a static load. It is approximately four times as strong as any other heat-resisting glass, and is practically unbreakable under any conditions normally encountered. This special glass is available only in the plain type.

Form W for Wall Mounting: Type RCD-8, Form W is similar to Form F, except it is provided with a hinged and flush door, so that it can be set absolutely flush with a concrete wall. It can also be mounted on a ceiling or wall by using the brackets listed on page 9 of this section. This unit provides perfect lighting for pits, underpasses, tunnels, and washracks. The refracting lenses can be set to refract the light either up or down.

APPLICATIONS

Automobile Lifts: Type RCD-8, Form F units installed under a lift provide perfect lighting of a high intensity, thereby speeding up the operations of greasing and repairing cars. The locations of units for two types of lifts or hoists are shown on page 10 of this section. Wheel type lifts are those in which the car is driven onto two trough-shaped tracks and the car rests on its wheels. This type can usually be lighted with two units mounted on the center line. The axle type lifts are those which raise the car with girders under the axles, leaving the wheels free. This type must usually be lighted with four units mounted two on each side, in order to eliminate shadows cast by the girders or frame of the lift.

The layouts are the same for both rotating and non-rotating lifts, since it is practical to keep a rotating lift in a fixed position in line with the lights while working on the car. If special conditions require that a car on a rotating lift be lighted uniformly regardless of its position after being raised, additional units must be installed.

A tapped drain hole for ½-inch pipe is provided in the bottom of the unit. When installed in the floor, it is recommended that a pipe be used to drain condensation and to maintain atmospheric pressure inside the unit.

Pits: The illustration on page 10 of this section gives a plan view of a pit showing the spacing of units. "D" should not be more than 12 feet. A short pit should have at least four units. Type RCD-8, Form W is recommended. It can be installed absolutely flush with the concrete wall. Units should be mounted as close to the top of the pit as possible. **Pits which are considered hazardous locations should be lighted with type RCDE-8 explosion-proof pit lights,** listed on page 11 of this section.

Underpasses and Tunnels: Type RCD-8, Form W units can be installed in the side walls or the ceiling of an underpass or tunnel. For side wall mounting, the units should be mounted 10 to 12 feet above the roadway, with refracting lenses turned so as to project the light downward. For ceiling mounting, plain lenses should be used, except in the case of one-way traffic, when the refracting lenses can be used for projecting the light in the direction of traffic. The spacing and number of units required for any installation depends on the width of the roadway and the intensity desired. Complete recommendations for lighting any underpass or tunnel will be given on receipt of detailed plans.

Washracks: Type RCD-8 units provide effective lighting for automobile washracks. The units can be mounted in the side walls and will provide high intensity lighting on the sides of the cars. The units should be installed on 4 to 6-foot centers with one row of units mounted 7 to 8 feet high, with refracting lenses set to project the light downward; and another row installed in the wall near the floor, with refracting lenses for projecting the light upward. Complete recommendations for lighting any washrack will be given on receipt of detailed installation plans.

Type RCD-8 Lighting Units

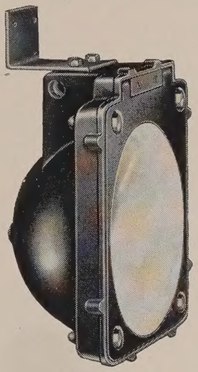


Fig. 1
Type RCD-8
With "L" Bracket for
Mounting Against Wall

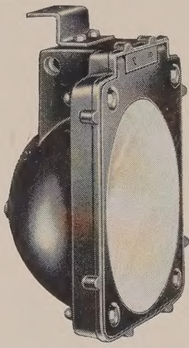


Fig. 2
Type RCD-8
With "Z" Bracket for
Attaching to Ceiling

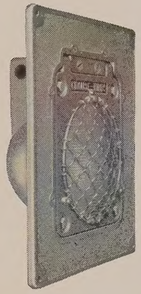


Fig. 3
Type RCD-8—Form W
With Frame and Grid

Housing: Cast Feraloy, dust-tight, and weatherproof. Cast aluminum housing can be furnished at $2.00, list extra.

Reflector: 8-inch, etched Alzak (Cat. No. KL666). A polished Alzak narrow beam reflector can be furnished (Cat. No. KL662—List Price, $6.25—Schedule "F" discounts. When furnished with pit lights, add $3.00 list to price of units).

Mountings: Can be mounted in concrete or fastened to the face of the wall with a bracket.

Any unit installed in the floor should be provided with a ½-inch drain pipe connecting the tapped drain hole in the bottom of the housing with a sewer. This provides a drain for condensation and maintains atmospheric pressure inside the unit. If connection to a sewer is not practical, the drain pipe can be run several feet into the ground into a hole filled with crushed stone.

Two types of brackets can be furnished. The "L" bracket can be used for mounting against a wall. The "Z" bracket can be used to attach the unit to the ceiling.

Frame: A mat or frame (Fig. 3) can be furnished with Form W unit. This is useful where the unit is to be installed after the concrete is poured. The mat is fastened to the wall with four ⅜-inch bolts. The lighting units must be ordered complete with the frame, otherwise they are not drilled and tapped for the frame.

Lamp Receptacle: Porcelain medium screw base (Cat. No. HL6019).

Wiring: Two ¾-inch hubs are provided, one on each side of the housing, so that wiring can be carried through the unit when several are mounted in a row. The reflector should be removed when wiring. Wire with slow-burning insulation must be used.

Door Frames: Form W—Held against housing by four ⅜-inch hex. head cap screws. These cap screws are necked so that they do not need to be removed. The four screws can be loosened with a socket wrench; the door can then be pulled open by grasping the two screws on the side opposite the hinge. A gasket is provided between the door and housing. **Form F**—The door is not hinged to the case. It is held against the case with eight flush, flat-head screws.

Lamps: 100-watt, A23 or PS25; 150-watt, PS25; or 200-watt, PS30-bulb lamps. The lamp receptacle bracket is adjustable and can be set for any of these lamps by loosening two screws and sliding the bracket until the lamp filament is at the center of the reflector. Unless otherwise specified on the order, all units are shipped with the lamp receptacle set for 200-watt lamps.

Lenses: Form W—8⅜-inch, flat, heat-resisting glass (Cat. No. HL4042—List Price, $4.00); or flat, refracting lens which projects the light in one direction (Cat. No. HL4079—List Price, $4.00). **Form F**—8½-inch, flat, heat-resisting glass (Standard, Cat. No. HL4319—List Price, $4.00; impact-resisting, Cat. No. HL4455—List Price, $5.00); or flat, refracting lens (Cat. No. HL4415—List Price, $4.00.

Finish: Black enamel.

Net Weight: 21½ lbs. **Shipping Weight:** 30 lbs.

Description		Style	With Plain Lens		With Refracting Lens	
			Cat. No.	List, each	Cat. No.	List, each
RCD-8	Form W Wall Mounting (Fig. 4, Page 8)	With Grid	41409	$20.00	41410	$20.00
		Without Grid	41332	19.00	41334	19.00
	Form F Floor Mounting (Fig. 3, Page 8)	With Standard Glass	41424	$19.00	41425	$19.00
		With Impact-Resisting Glass	41427	20.00	.....	.....

Brackets and Frame

For Type RCD-8 Lighting Units

Description		Cat. No.	List each, additional
Brackets	"L" Bracket	HL4242	$1.00
	"Z" Bracket	HL4243	1.00
Frame	For Form W Only	HL5194	$5.00

Prices do not include incandescent lamps.

Discounts: Schedule "R"

Type RCD-8 Lighting Units

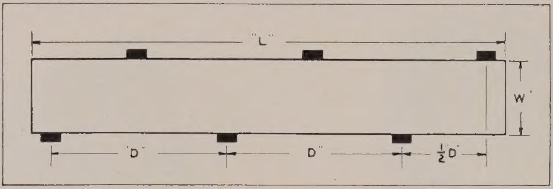


Fig. 4
Plan View of Pit showing Spacing of Units
("D" should not be more than 12 feet. A short pit should have at least four units.)

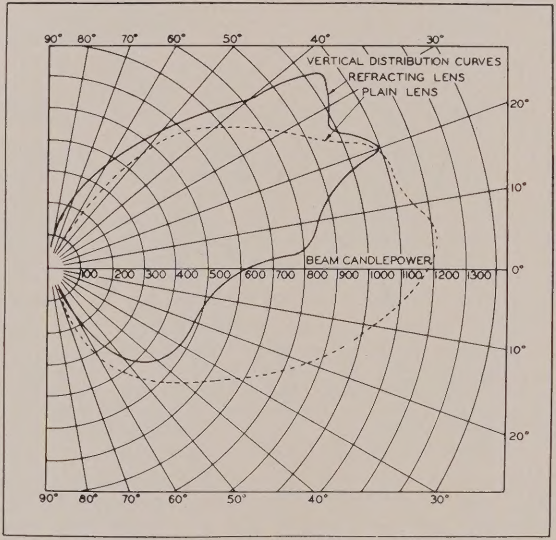


Fig. 5
Distribution Curve
With 200-Watt, PS30-Bulb, Clear Lamp

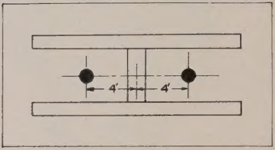


Fig. 7
Lighting Layout for Wheel Type Lift

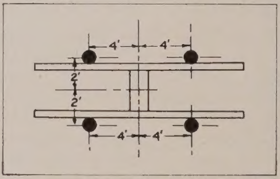


Fig. 8
Lighting Layout for Axle Type Lift

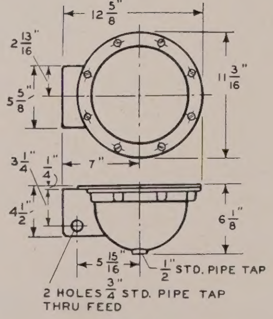

12 5/8"
2 13/16"
5 5/8"
11 3/16"
3 1/4"
1/4"
7"
4 1/2"
6 1/8"
5 15/16"
1/2" STD. PIPE TAP
2 HOLES 3/4" STD. PIPE TAP THRU FEED

Fig. 6
Dimensions—Type RCD-8, Form F

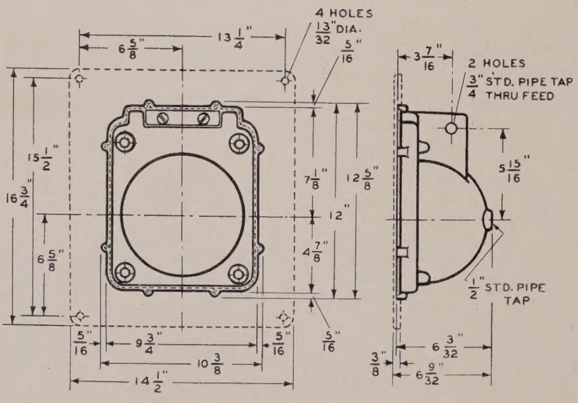

4 HOLES 13/32" DIA.
13 1/4"
6 5/8"
5/16"
15 1/2"
16 3/4"
6 5/8"
7 1/8"
12 5/8"
12"
4 7/8"
5/16"
5/16"
9 3/4"
5/16"
10 3/8"
14 1/2"
5/16"
3 7/16"
2 HOLES 3/4" STD. PIPE TAP THRU FEED
5 15/16"
1/2" STD. PIPE TAP
6 3/32"
3/8"
6 9/32"

Fig. 9
Dimensions—Type RCD-8, Form W●

●Denotes change in illustration.

Type RCDE-8 Explosion-Proof Pit Lights

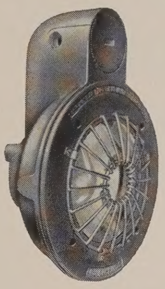


Fig. 1
Type RCDE-8

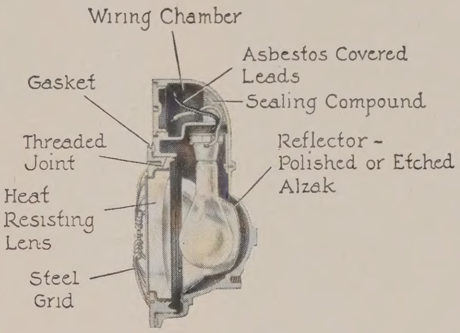


Fig. 2
Type RCDE-8—Sectional View

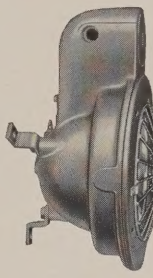


Fig. 3
Type RCDE-8
With "Z" Brackets

Type RCDE-8 pit light is designed to meet the requirements of an explosion-proof lighting unit. It is recommended for lighting automobile greasing pits and lifts, and for general use in hazardous locations.

When installed in the concrete wall of a pit or in the floor, the unit is practically flush with the concrete, for the door projection is only ⅜ of an inch when used without a grid, and 1$\frac{7}{16}$ inches when used with a grid. For mounting on the surface of a wall, three steel "Z" brackets can be supplied.

Type RCDE-8 can also be furnished as a floodlight with trunnion mounting for permanent installation or portable use. It is listed in section 201, page 19. It is recommended for use around oil refineries, chemical plants, and for lighting spray booths from the outside.

For short range lighting, the wide beam reflector should be used; for longer range or for spotlight applications, the polished Alzak reflector provides a narrow beam.

For installation as a pit light, the cast Feraloy housing and cast aluminum door are recommended. When mounted in the floor where alkaline cleaners are used, the cast Feraloy housing and cast brass door are recommended. Aluminum should be used where the unit will be subjected to hydrogen sulphide fumes.

Description		Housing	Door	With Narrow Beam Polished Alzak Reflector		With Wide Beam Etched Alzak Reflector	
				Cat. No.	List, each	Cat. No.	List, each
RCDE-8	Without Brackets (Fig. 1)	Feraloy	Aluminum	41704	$62.50	41702	$59.50
		Feraloy	Brass	41705	72.00	41706	69.00
		Aluminum	Aluminum	41707	62.50	41708	59.50
		Brass	Brass	41709	88.00	41710	85.00
	With Three "Z" Brackets For Surface Mounting (Fig. 3)	Feraloy	Aluminum	41711	$63.50	41712	$60.50
		Feraloy	Brass	41713	74.00	41714	71.00
		Aluminum	Aluminum	41715	63.50	41716	60.50
		Brass	Brass	41717	89.00	41718	86.00

Prices do not include incandescent lamps.

Discounts: Schedule "R"

Type RCDE-8 Explosion-Proof Pit Lights

Housing: Cast Feraloy, cast aluminum, or cast brass.

Door: Cast aluminum or cast brass. A threaded joint with at least five full threads is provided between the door and the housing. Four blind holes are provided in the door to facilitate tightening or removing it. Two ⅜-inch bolts or steel pins at least 2½ inches long can be placed in two of these holes and a bar used across them.

Reflectors: 8-inch, wide beam etched Alzak, for short range (Cat. No. KL666); or narrow beam polished Alzak, for long range (Cat. No. KL662). See section 206, page 5.

Lamp Receptacle: Porcelain medium screw base (Cat. No. HL6019).

Wiring: The wiring chamber is separated from the housing by a wall and the point where the wires pass through the wall is sealed with a special compound. Ample room is provided for splicing. A threaded cover is provided for the wiring chamber. Three short leads of asbestos-covered wire are furnished. One wire is grounded to the housing.

Lens: 8½-inch, plain, impact and heat-resisting glass. A refracting screen, designed to refract the light in one direction, can be furnished (Cat. No. HL5905—List Price, $1.00—Schedule "F" discounts). It is mounted underneath the outer lens and can be rotated to throw the light in any one direction.

Lamps: 100-watt, A23 or PS25; 150-watt, PS25; or 200-watt, PS30-bulb lamps. The lamp receptacle bracket is adjustable and can be set for any of these lamps by loosening two screws and sliding the bracket until the lamp filament is at the center of the reflector. Unless otherwise specified on the order, all units are shipped with the lamp receptacle set for the 200-watt lamp.

Grid: A heavy steel grid is provided over the lens. It can easily be removed to facilitate cleaning.

Finish: Cast Feraloy housing, cadmium-galvanized. Cast aluminum or cast brass, natural finish.

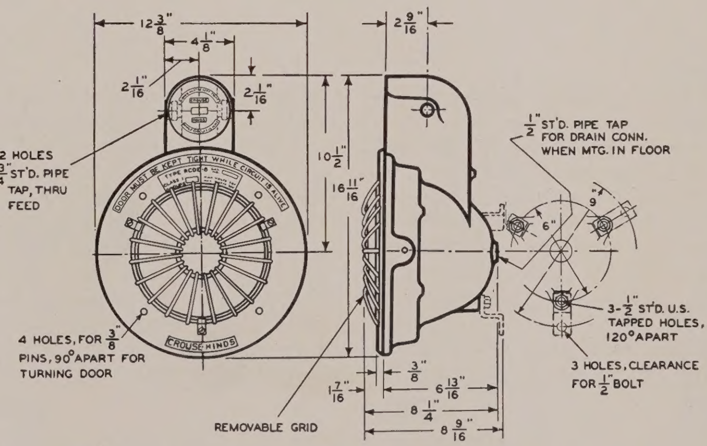

12 3/8"
4 1/8"
2 1/16"
2 1/16"
2 HOLES 3/4" ST'D. PIPE TAP, THRU FEED
DOOR MUST BE KEPT TIGHT WHILE CIRCUIT IS ALIVE
TYPE RCDE-8
CROUSE-HINDS
4 HOLES, FOR 3/8" PINS, 90° APART FOR TURNING DOOR
10 1/2"
16 11/16"
2 9/16"
1/2" ST'D. PIPE TAP FOR DRAIN CONN. WHEN MTG. IN FLOOR
9
6"
3-1/2" ST'D. U.S. TAPPED HOLES, 120° APART
3 HOLES, CLEARANCE FOR 1/2" BOLT
3/8"
1 7/16"
6 13/16"
8 1/4"
8 9/16"
REMOVABLE GRID

Fig. 4
Dimensions—Type RCDE-8

Type FS Lighting Units

For Lighting Steps, Floors, Walks, and Gardens

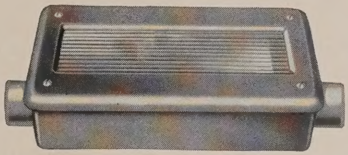


Fig. 1
Type FS—25-Watt

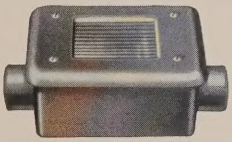


Fig. 2
Type FS—6-Watt

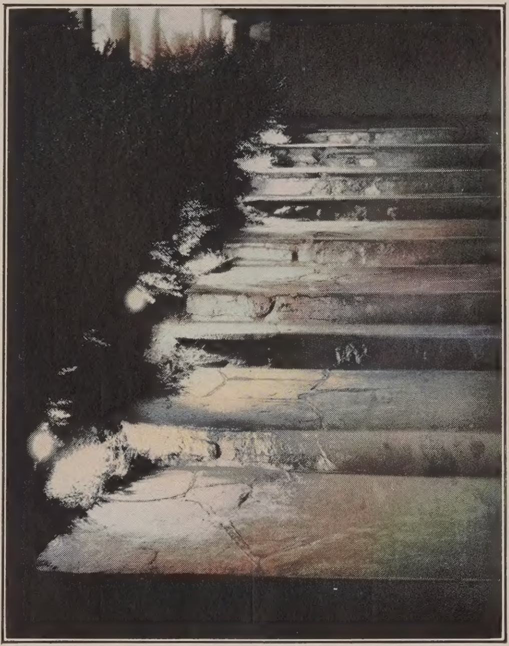
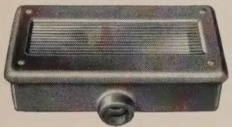
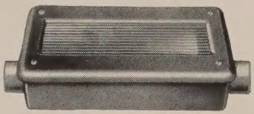
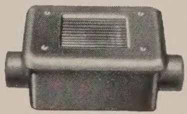


Fig. 3
Illumination of Stone Stairway

Type FS lighting units are small, made to mount flush in concrete, stone, or plastered walls; and to light steps, walks, floors, and gardens. They can also be used in hospitals, mounted low in the wall for lighting the floor without disturbing patients.

These units have covers equipped with refracting glass, which is normally set to refract light downward. Two styles are listed: a 25-watt unit and a 6-watt unit, with two hub combinations each—through feed and bottom hubs, which will meet most requirements. However, a wide variety of hub combinations can be furnished since the FS 25-watt unit is made up of a regular FS series four-gang Condulet body as listed in section 10, page 19; and the 6-watt, a regular FS series single-gang Condulet body as listed in section 10, pages 1 to 3, of Condulet Catalog 2500.

The receptacles complete with mounting brackets, listed on the next page, can be attached to the standard FS series Condulets, *single* and *four-gang* with the screws which are furnished with them.

Illustrations	Cat. No.	List, each	Size		Style	Cat. No.	List, each	Illustrations
 (Dead End)	42904	$ 7.00	25-Watt	¾	With Aluminum Cover	42912	$ 7.20	 (Through Feed)
	42905	7.30		1		42913	7.40	
	42906	$10.00		¾	With Brass Cover (Chromium-Plated)	42914	$10.20	
	42907	10.30		1		42915	10.40	
(Dead End)	42879	$ 3.50	6-Watt	½	With Aluminum Cover	42877	$ 3.60	 (Through Feed)
	42908	3.60		¾		42916	3.80	
	42909	3.70		1		42917	4.05	
	42880	$ 5.00		½	With Brass Cover (Chromium-Plated)	42878	$ 5.10	
	42910	5.10		¾		42918	5.30	
	42911	5.20		1		42919	5.55	

Prices do not include incandescent lamps.

Discounts: Schedule "F"

Type FS Lighting Units

For Lighting Steps, Floors, Walks, and Gardens

Housing: Cast Feraloy, cadmium-galvanized. Cast aluminum or cast brass housings can be furnished.

Hubs: The standard hubs on FS units have an integral bushing and tapered thread. They can be furnished with threadless hubs for thick or thin wall conduit; prices on application.

Lamp Receptacles: 25-Watt Units—Intermediate screw base (Cat. No. KL323—List Price, $ .75).
6-Watt Units—Candelabra screw base (Cat. No. KL320—List Price, $ .60).

Covers: Cast aluminum, natural finish or cast brass, chromium-plate polished finish. A gasket is furnished to make a watertight joint with the housing.

Lens: Clear, one-way, refracting, ribbed glass (Cat. Nos. 25-watt, KL325—List Price, $1.00; 6-watt, KL315—List Price, $ .50).

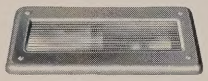
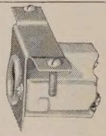
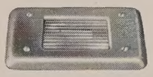
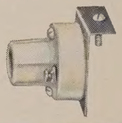
Lamps: 25-Watt Units—25-watt, T6½-bulb, clear, intermediate base lamp.

6-Watt Units—6-watt, S6-bulb, clear candelabra base lamp.

Shipping Weights:

Description	With Aluminum Cover	With Brass Cover
25-Watt Unit, Complete	6½ lbs.	8 lbs.
6-Watt Unit, Complete	3 lbs.	3¾ lbs.
25-Watt Cover	1½ lbs.	3 lbs.
6-Watt Cover	½ lb.	1½ lbs.

Covers and Receptacles for Type FS Lighting Units

Illustrations	Description	Aluminum		Brass (Chromium-Plated)		Size	Cat. No.	List, each	Description	Illustrations
		Cat. No.	List, each	Cat. No.	List, each					
	Covers	KL326	$3.00	KL328	$6.00	25-Watt	KL330	$1.20	Receptacles Complete with Brackets	
		KL316	$1.75	KL318	$3.25	6-Watt	KL321	$ .90		

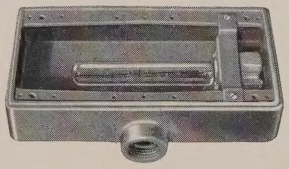


Fig. 4
Type FS—25-Watt
With Cover Removed

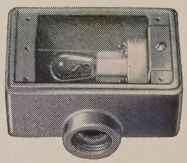


Fig. 5
Type FS—6-Watt
With Cover Removed

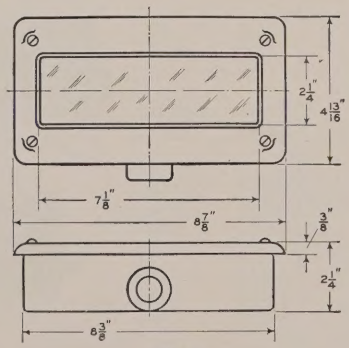


Fig. 6
Dimensions—Type FS, 25-Watt

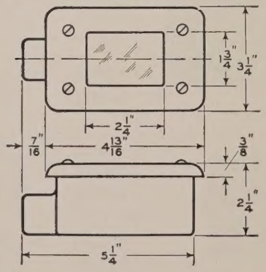


Fig. 7
Dimensions—Type FS, 6-Watt

Discounts: Schedule "F"

Type FCS-8 Underwater Floodlights

For Swimming Pools and Fountains

250 to 400-Watt

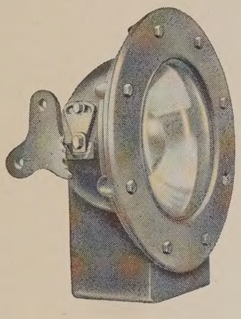


Fig. 1
Type FCS-8
With Wet-Niche Brackets

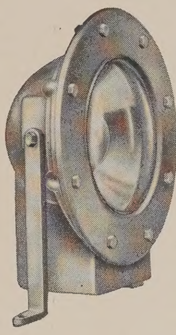


Fig. 2
Type FCS-8
With Angle Brackets

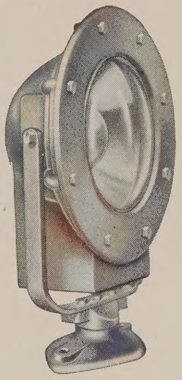


Fig. 3
Type FCS-8
With Trunnion and Base

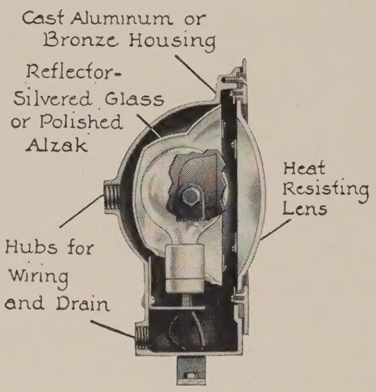

Cast Aluminum or Bronze Housing
Reflector-Silvered Glass or Polished Alzak
Heat Resisting Lens
Hubs for Wiring and Drain

Fig. 4
Type FCS-8
Sectional View

Type FCS-8 is an underwater floodlight for use in lighting swimming pools and fountains. For swimming pool lighting, type FCS-8 can be mounted permanently in the side wall of the pool, or can be installed in a niche in the wall. When used for lighting fountains, type FCS-8 floodlight can be mounted on top of a ¾-inch conduit by means of the tapped hub in the back, or can be installed with either of the adjustable mountings listed below. A servicing pedestal can be furnished which allows the floodlight to be raised above the surface of the water for relamping.

Either bronze or aluminum housings can be furnished. Cast aluminum is recommended for fountains except in the case of salt water. Bronze should be used for all swimming pools where water purification is used or for salt water.

Type	Lens†	Cast Aluminum			Cast Bronze		
		With Glass Reflector Cat. No.	With Polished Alzak Reflector Cat. No.	List, each	With Glass Reflector Cat. No.	With Polished Alzak Reflector Cat. No.	List, each
FCS-8	**Without Mounting Brackets**						
	Plain	41591	42785	$45.00	41672	42801	$55.00
	Spread	41670	42786	45.00	41673	42802	55.00
	Diffusing	41669	42787	45.00	41674	42803	55.00
	Asymmetric	41671	42788	45.00	41675	42804	55.00
	With Trunnion and Base						
	Plain	41997	42789	$52.00	41998	42805	$62.00
	Spread	41999	42790	52.00	42000	42806	62.00
	Diffusing	42001	42791	52.00	42002	42807	62.00
	Asymmetric	42003	42792	52.00	42004	42808	62.00
	With Two Angle Brackets						
	Plain	41684	42793	$47.00	41688	42809	$58.00
	Spread	41685	42794	47.00	41689	42810	58.00
	Diffusing	41686	42795	47.00	41690	42811	58.00
	Asymmetric	41687	42796	47.00	41691	42812	58.00
	With Positioning Stops and Brackets—For Wet-Niche Installation						
	Plain	42005	42797	$49.00	42006	42813	$61.00
	Spread	42007	42798	49.00	42008	42814	61.00
	Diffusing	42009	42799	49.00	42010	42815	61.00
	Asymmetric	42011	42800	49.00	42012	42816	61.00

Prices do not include incandescent lamps.
†Colored lenses can be furnished at $3.00 list, additional.

Discounts: Schedule "F"

Type FCS-8 Underwater Floodlights

For Swimming Pools and Fountains — 250 to 400-Watt

Housing: Cast aluminum or cast bronze.

Reflector: 8-inch, silvered glass or polished Alzak, compound parabolic. See section 206, page 5.

Lamp Receptacle: Porcelain medium screw base (Cat. No. HL9131).

Wiring Connections: Two ¾-inch threaded hubs are provided at the back of the unit. If the floodlight is rigidly installed, lead cable should be run into the unit. Lead-covered cable or type S hard service cable can be run through the rubber drain hose if the floodlight is not rigidly installed. It is recommended that a three-conductor cable be used. The third wire serves as a grounding conductor for the housing.

Door Frame: Same material as case. It is held against the case with eight hex. head cap screws. A rubber gasket is provided between the door and the case.

Lens: Plain lens for narrow beam (Cat. No. HL5375). Spread lens for rectangular beam (Cat. No. HL5376). Diffusing lens for wide beam (Cat. No. HL5377). Asymmetric lens for swimming pools (Cat. No. HL5290—List Price, $1.70). See section 206, page 4.

Lamps: 250-watt, G30-bulb Floodlight Service lamp is recommended. The 400-watt, G30-bulb Floodlight Service lamp can be used with clear lens, but not with colored lenses. **These lamp ratings are only for units which are continuously covered with water, or have a heavy spray falling continuously on them. The lamps should never be turned on until the floodlights are covered with water.**

Drain: Underwater floodlights should never be installed underwater or where subjected to spray unless provided with a drain. The drain not only takes care of condensation, but allows the air to expand and contract freely, when the lamp is turned on and off. If this "breathing" is not provided for, the air will eventually draw in water no matter how tight the seal. A ¾-inch rubber drain hose can be used and three-conductor lead cable or type S hard service cable run through the drain hose. If the unit points directly upwards, the hub in the center of the back should be used. If it points horizontally or not more than 65° above horizontal, the hub at the bottom should be used.

Net Weights: Cast aluminum, 10 lbs. Cast bronze, 24½ lbs.

Shipping Weights: Cast aluminum, 18½ lbs. Cast bronze, 33 lbs.

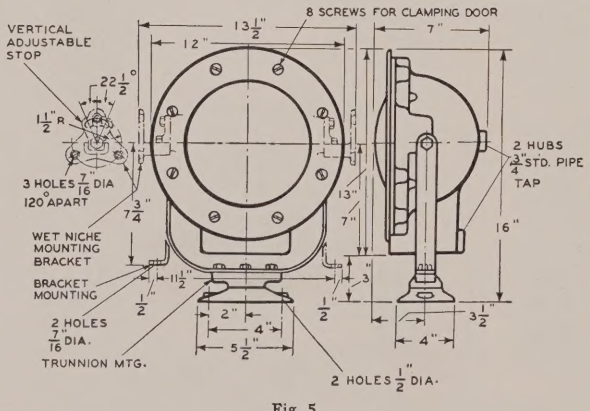


Fig. 5
Dimensions—Type FCS-8

Discounts: Schedule "F"

Types FDE, FDS, and FDV Underwater Floodlights

For Swimming Pools and Fountains

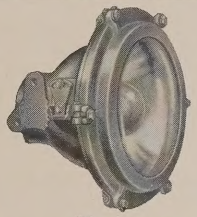


Fig. 1
With Positioning Stops and Brackets—For Wet-Niche Installation

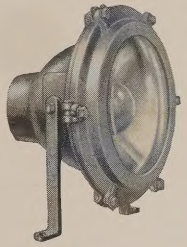


Fig. 2
With Two Angle Brackets

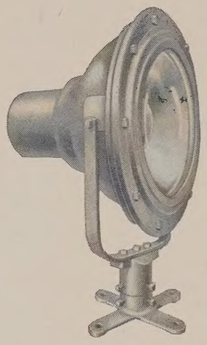


Fig. 3
With Trunnion and Base

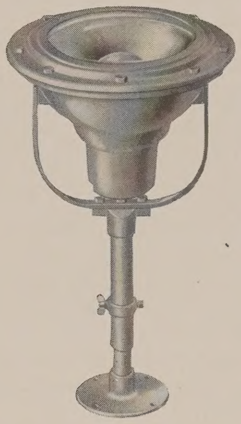


Fig. 4
With Servicing Pedestal

These floodlights have been developed for submersion in water, such as in fountain and swimming pool installations. They can be furnished with various types of mountings for convenient installation under any condition.

Fountains must be lighted for their beauty to be fully appreciated, and types FDE and FDV floodlights provide adequate lighting for any size or type of fountain. Colored light can be used with great effectiveness on most fountains. Since the size and arrangements of fountains vary greatly, Crouse-Hinds engineers will gladly make detailed recommendations for the lighting of any fountain upon receipt of complete plans.

Cast bronze housings are standard for swimming pools. Cast aluminum is recommended for fountains except those using salt water, and for swimming pools where no water purification is used.

Description		Cast Aluminum					Cast Bronze				
		Weight, Lbs.		With Glass Reflector	With Alzak Reflector	List, each	Weight, Lbs.		With Glass Reflector	With Alzak Reflector	List, each
		Net	Ship.	Cat. No.	Cat. No.		Net	Ship.	Cat. No.	Cat. No.	
1000-Watt Floodlights											
FDS-14	With Positioning Stops and Brackets. For Wet-Niche Installations (Fig. 1)	37	62	42032	42825	$93.00	68	93	42022	42826	$113.00
	With Two Angle Brackets (Fig. 2)	37	62	42034	42827	$90.00	68	93	42033	42828	$110.00
FDE-14	With Trunnion and Base (Fig. 3)	39	65	42036	42829	$95.00	70	96	42035	42830	$115.00
FDV-14	With Servicing Pedestal (Fig. 4)	44	70	42038	42831	$97.00	75	101	42037	42832	$117.00
1500-Watt Floodlights											
FDS-16	With Positioning Stops and Brackets. For Wet-Niche Installations (Fig. 1)	43	68	42014	42833	$102.00	81	106	42013	42834	$128.00
	With Two Angle Brackets (Fig. 2)	43	68	42016	42835	$100.00	81	106	42015	42836	$125.00
FDE-16	With Trunnion and Base (Fig. 3)	51	77	42018	42837	$105.00	89	115	42017	42838	$130.00
FDV-16	With Servicing Pedestal (Fig. 4)	56	85	42020	42839	$107.00	94	123	42019	42840	$132.00

Prices do not include incandescent lamps.

Types FDE, FDS, and FDV Underwater Floodlights

For Swimming Pools and Fountains

Housing: Cast bronze or cast aluminum.

Reflectors: Silvered glass or polished Alzak. Diameters: 1000-Watt Floodlights—14 inches; 1500-Watt Floodlights—16 inches. See section 206, page 5.

Mountings: Types FDS-14 and FDS-16 are for wet-niche swimming pool lighting. They also are furnished with angle-bracket mounting for fountains. The wet-niche bracket mounting allows the floodlight to be lifted from its brackets and raised to the surface of the pool for relamping. An adjustable stop is provided so that the floodlight automatically returns to its exact original setting when replaced in the brackets. The angle-bracket mounting allows the floodlight to be tipped vertically, but not rotated horizontally.

Types FDE-14 and FDE-16 have a trunnion and swivel base.

Types FDV-14 and FDV-16 have a servicing pedestal which allows the floodlight to be raised above the water for relamping when mounted just below the surface of the water in a fountain.

Focusing Mechanism: Operated from inside of case.

Lamp Receptacle: Porcelain Mogul screw base (Cat. No. HL7136).

Wiring Connections: Two ¾-inch threaded hubs are provided for wiring and drain connections. Type S hard service cable can be run through the rubber drain hose if the floodlight is not rigidly installed. A three-conductor No. 14 cable is used. The third wire serves as a grounding conductor for the housing. Type FDS with brackets for wet-niche are furnished with 15 feet of cable. Other underwater floodlights are furnished with three feet of cable; longer cable can be furnished. If cable is not to be run through the drain hose, the floodlight will, if specified on the order, be furnished with a watertight stuffing box where the cable enters the housing.

Door Frame: Cast bronze or cast aluminum; gasketed, and held against the case by six clamps.

Lens: 14 or 16-inch diameter, clear, Pyrex, convex, heat-resisting lens in plain, spread, or diffusing styles. Color screens can be furnished.

Lamps: FDS-14, FDE-14, and FDV-14—500 or 1000-watt, G40-bulb Floodlight Service lamps. FDS-16, FDE-16, and FDV-16—1000 or 1500-watt, G-bulb Floodlight Service lamps.

These ratings apply only when the floodlights are completely covered with water.

Drain: It is absolutely essential to provide a permanent drain for any floodlight mounted underwater or which is subjected to spray, in order to eliminate condensation. This drain pipe also allows for the expansion and contraction of the air within the floodlight. These floodlights are provided with two tapped holes for connection to 1-inch flexible drain hose. The drain hose should be connected to the lower of the two openings for each installation. For swimming pool installations, hose in 10-foot lengths is sufficient for most locations. Lengths of hose complete with couplings are listed below; other lengths can be furnished.

Drain Hose

Drain Hose: These floodlights are furnished with a short nipple of ¾-inch pipe for attaching the drain hose to the floodlight. One-inch hose will slip over this nipple and can be clamped to it with a standard bronze hose clamp. One-inch hose should be used if the electrical cable is run through the hose. If the electrical cable is not run through the hose, smaller hose can be used.

Floodlights which are permanently installed can be equipped with any type of rubber hose. Floodlights of the wet-niche type, which are to be removable for relamping, should be equipped with extra flexible 1-inch drain hose. The hose listed below is of this type, being made of rubber with a bronze spring wire insert to prevent its collapsing under the water pressure.

10-Foot Lengths, 1-Inch Hose with 2 Hose Clamps	**Cat. No. HL5558**	**List Price, $8.00 each**

Color Screens

The floodlights listed on page 3 are equipped with clear lenses. The color screens listed below are designed to be inserted inside the floodlight, directly behind the clear lens.

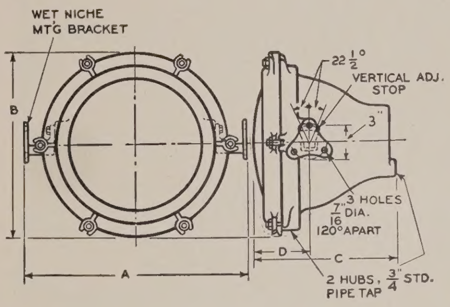
For Floodlights	**Cat. No.**				**List, each**
	Red	**Green**	**Amber**	**Blue**	
FDS-14, FDE-14, and FDV-14	**HL3239**	**HL3241**	**HL3240**	**HL3242**	**$ 9.00**
FDS-16, FDE-16, and FDV-16	**HL241**	**HL242**	**HL244**	**HL243**	**13.00**

Prices do not include incandescent lamps.

Types FDE, FDS, and FDV Underwater Floodlights

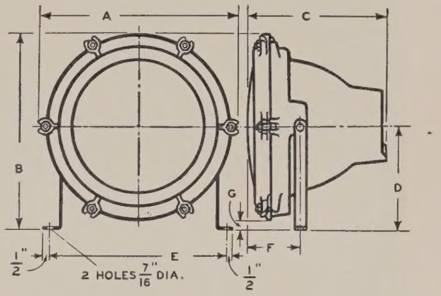
For Swimming Pools and Fountains

Type FDS
With Positioning Stops and Brackets


WET NICHE MTG BRACKET
B
22 1/2°
VERTICAL ADJ. STOP
3"
3 HOLES 7/16" DIA. 120° APART
D
C
A
2 HUBS, 3/4" STD. PIPE TAP

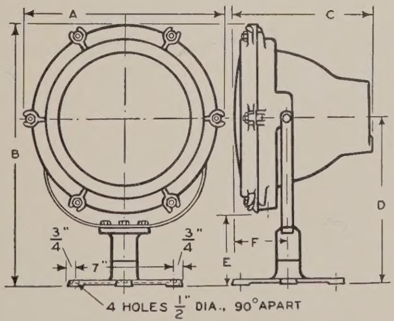
Type	A	B	C	D
FDS-14	20	18½	15⅜	5
FDS-16	23¾	22¼	13½	5½

Type FDS
With Two Angle Brackets


A
C
B
D
G
1/2"
E
F
2 HOLES 7/16" DIA.
1/2"

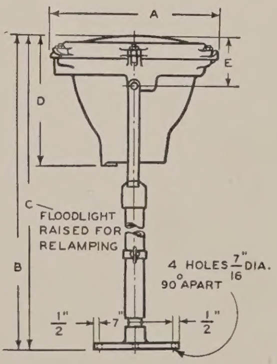
Type	A	B	C	D	E	F	G
FDS-14	18½	19¾	15⅜	10½	16⅛	5	1¼
FDS-16	22¼	23⅜	13½	12¼	19⅜	5½	1

Type FDE
With Trunnion and Base


A
C
B
D
3/4"
3/4"
7"
F
E
4 HOLES 1/2" DIA., 90° APART

Type	A	B	C	D	E	F
FDE-14	18½	25	15⅜	16¼	7	5
FDE-16	22¼	27⅜	13½	16¼	5⅛	5½

Type FDV
With Servicing Pedestal


A
E
D
C
FLOODLIGHT RAISED FOR RELAMPING
B
4 HOLES 7/16" DIA. 90° APART
1/2"
7"
1/2"

Type	A	B	C	D	E
FDV-14	18½	33	39	15⅜	5
FDV-16	22¼	33½	39½	13½	5½

Underwater Floodlights

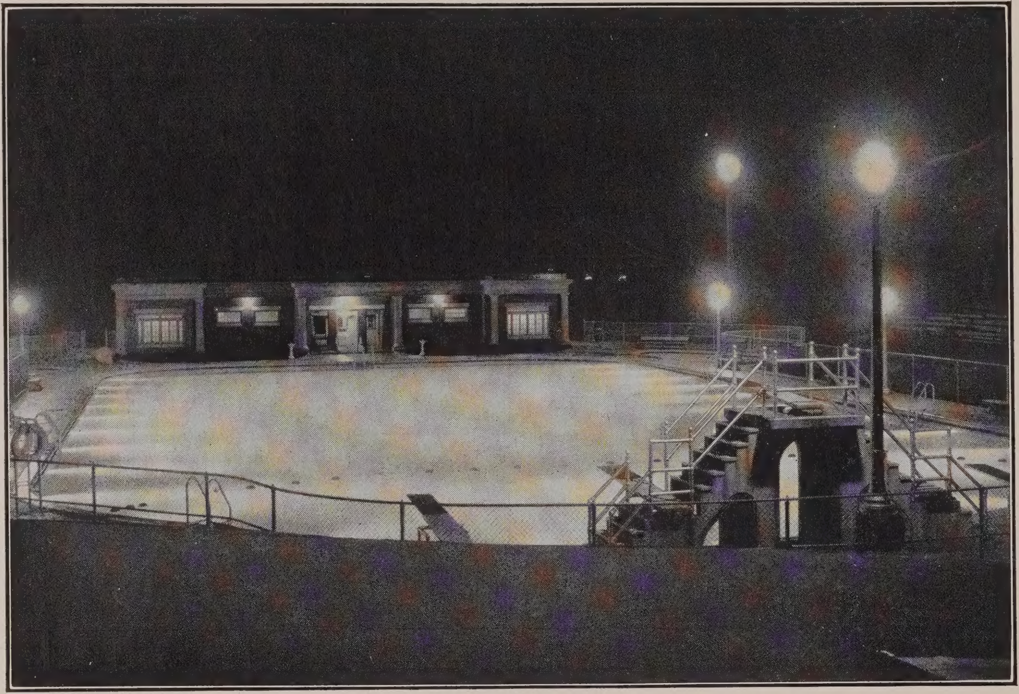


Fig. 1
Underwater Floodlight Installation
Swimming Pool—Chanute, Kansas

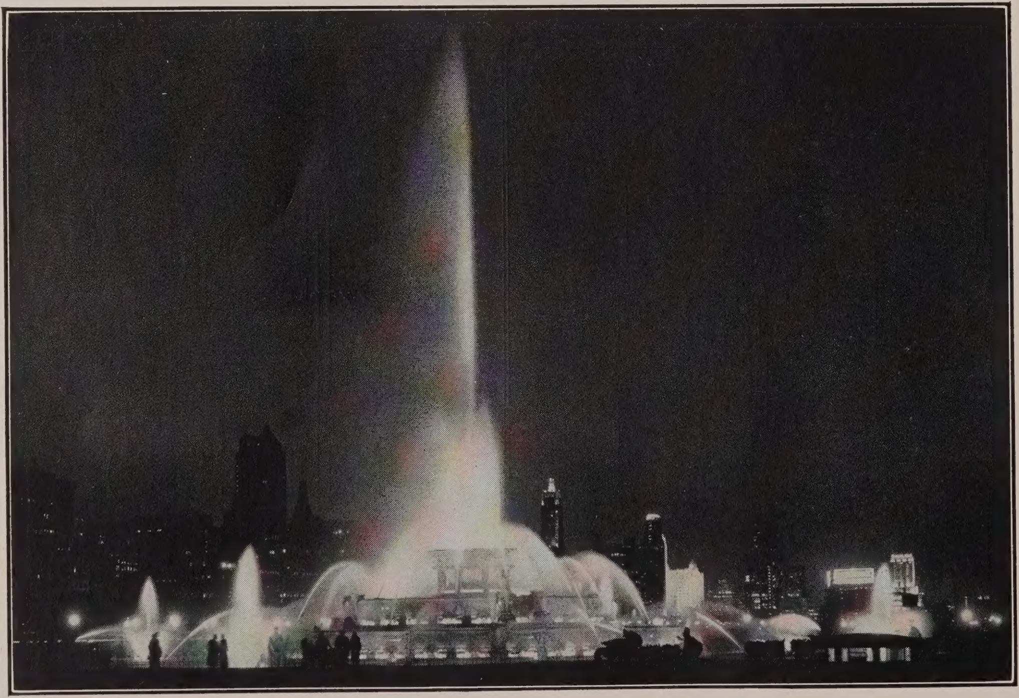


Fig. 2
Underwater Floodlight Installation
Buckingham Memorial Fountain—Chicago

Porthole Rings for Swimming Pool Lighting

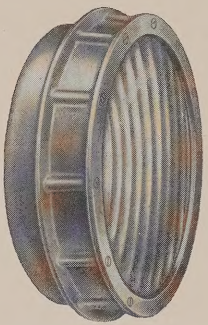


Fig. 1
Porthole Ring Complete

The most effective way to light a swimming pool is underwater. For best results, portholes should be set in the sides of the pool just below the water line with type ADE-14 or ADE-16 floodlights installed behind them. The spacing distance between units depends on the shape and size of the pool; from 10 to 15 feet apart will provide good lighting in the average pool.

For pools that have no tunnel or runway behind the walls of the pool, manholes can be installed and the floodlights mounted in them.

Pools not wider than 30 feet can usually be lighted with type ADE-14 equipped with 500-watt, G40-bulb Floodlight Service lamp. For larger pools, type ADE-16 with 1000-watt, G40-bulb lamps should be used. The floodlights should be tipped down until the top edge of the beam is horizontal. This prevents the powerful rays of the main beam from being refracted up into the eyes of spectators when the surface of the water is disturbed by a swimmer.

Swimming pools can be lighted underwater in color. Green has been found to be the most pleasing color for this purpose.

Floodlights: The floodlights are furnished with a slotted bracket which is bolted to the porthole ring as shown in the installation drawing on the next page. The floodlight can easily be rotated to the relamping position. Type ADE-14 is similar to type ADE-14 described in detail in section 201, pages 7 and 8; and type ADE-16 is similar to type ADE-16 listed in section 201, pages 9 and 10, except for the special brackets. The floodlights are furnished with plain lenses.

Description		Cat. No.	List, each
Porthole Ring	With Bronze Housing and Ring	HL3154	$60.00
	With Aluminum Housing and Ring	HL4106	40.00
ADE-16	With Relamping Brackets and Door	42087	$85.00
	With Relamping Brackets, without Door and Lens	42102	66.50
ADE-14	With Relamping Brackets and Door	42088	$60.00
	With Relamping Brackets, without Door and Lens	42103	47.00

Prices do not include incandescent lamps.

Porthole Rings for Swimming Pool Lighting

Housing: Bronze is standard for swimming pools. Cast aluminum housings can be used in fresh water if no water purification system is used.

Lens Clamping Ring: Cast bronze, polished and chromium-plated, with bronze rings; cast aluminum, polished, with aluminum rings. It clamps the lens against the main housing with 12 flat-head screws. The ring overlaps the main housing.

Lens: Convex, Pyrex, heat-resisting, horizontal, spread lens, 16⅞ inches in diameter (Cat. No. HL6810).

Gasket: A watertight seal is provided by a plastic cement gasket (Cat. No. HL9012). Approximately one pound of cement is required for each unit, and is furnished with it.

Shipping Weights: Bronze, 60 lbs. Aluminum, 38 lbs.

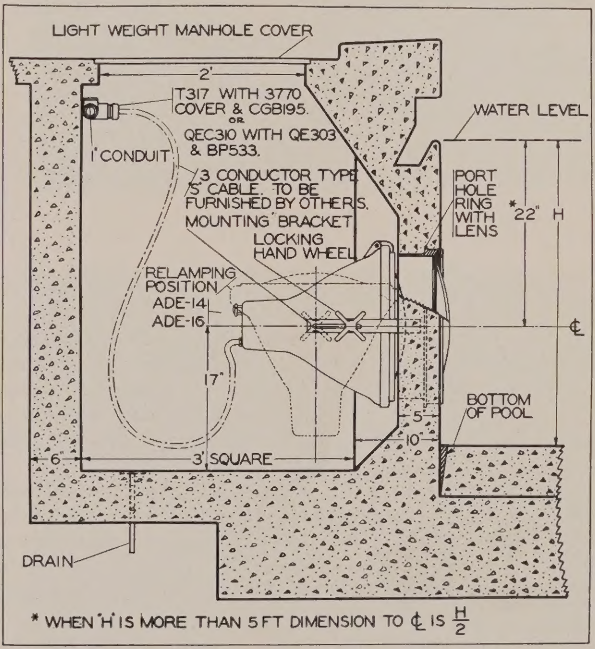

LIGHT WEIGHT MANHOLE COVER
2'
T317 WITH 3770 COVER & CGB195.
OR
QEC310 WITH QE303 & BP533.
1" CONDUIT
3 CONDUCTOR TYPE "S" CABLE. TO BE FURNISHED BY OTHERS.
MOUNTING BRACKET
LOCKING HAND WHEEL
RELAMPING POSITION
ADE-14
ADE-16
17"
WATER LEVEL
PORT HOLE RING WITH LENS
*22"
H
℄
5"
10"
BOTTOM OF POOL
6"
3' SQUARE
DRAIN
* WHEN "H" IS MORE THAN 5 FT DIMENSION TO ℄ IS $\frac{H}{2}$

Fig. 2
Installation of Porthole Ring

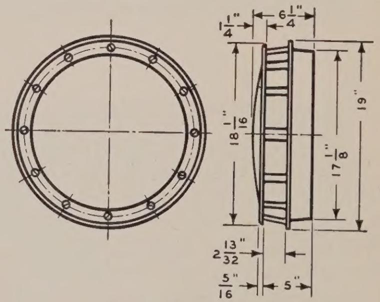

$1\frac{1}{4}$"
$6\frac{1}{4}$"
$18\frac{1}{16}$"
$17\frac{1}{8}$"
19"
$2\frac{13}{32}$"
$\frac{5}{16}$"
5"

Fig. 3
Dimensions—Porthole Ring

CROUSE-HINDS

Incandescent Searchlights

14-Inch, 16-Inch, 18-Inch, 24-Inch—Long Range

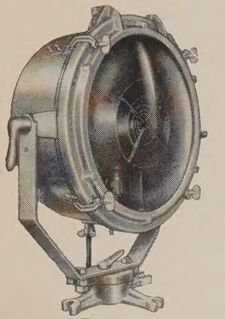


Fig. 1
Type DCE
Trunnion Mounting

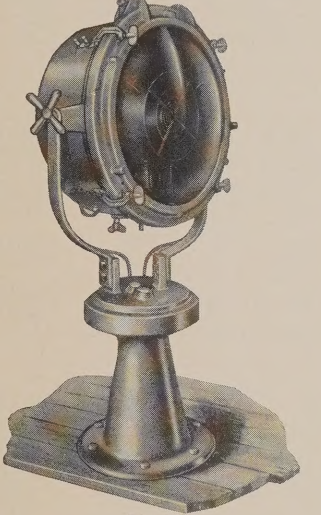


Fig. 2
Type DCY
Hand Control
Pedestal Mounting

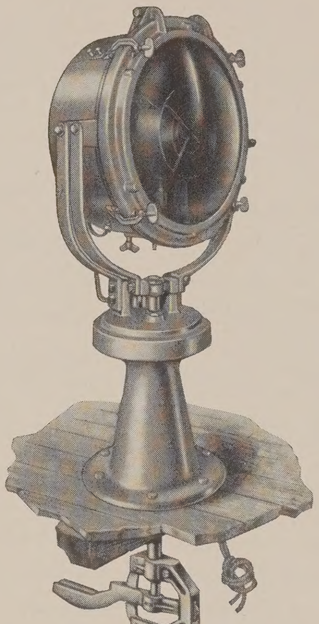


Fig. 3
Type DCX
Pilot House Lever Control

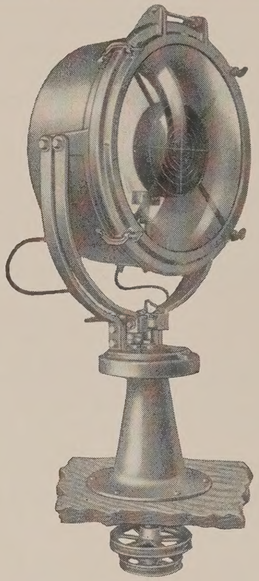


Fig. 4
Type DCXR
Remote Control

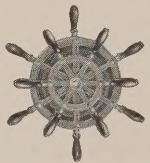


Fig. 5
Remote Control
Wheel Assembly

Crouse-Hinds incandescent searchlights are made in several sizes and with a variety of mountings. They are designed for long range spotlight or searchlight use. The accurate reflector used confines the light to a narrow beam of high candlepower.

Type DCE: Type DCE is intended for use as a fixed searchlight for spotting small areas from a distance. It can be used as a hand-controlled searchlight, but type DCY is recommended where the searchlight must be redirected frequently. Type DCE-24 meets the requirements of the United States Department of Commerce for a directional searchlight for use in conjunction with advertising beacons and for marking transmission line spans.

Type DCY: Type DCY is a hand-controlled searchlight for use on boats, watch towers, etc., where it is convenient to direct the searchlight by the handle mounted on the back of the housing. The horizontal adjustment is provided with ball bearings.

Type DCX: Type DCX is designed to be mounted on the roof of a pilot house or watch tower and to be controlled from below by means of levers. The horizontal adjustment is provided with ball bearings. The control stem can be furnished in any length desired. The lever controlling the vertical adjustment locks itself when released.

Type DCXR: Type DCXR is similar to type DCX except it is arranged for remote control with wire rope and pulleys. Two pulleys are provided on the control stem and two on the remote control wheel assembly. The wire rope or cable connecting them is not supplied.

For use on ships where the searchlight is only used intermittently, or where a lamp life of 100 hours is satisfactory, the 420-watt, 12-volt lamp is particularly recommended. Its highly concentrated filament produces a much narrower beam than can be obtained with any higher voltage lamp. Most ships use 115 volts D.C. for lighting, but it is a simple matter to install a small standard rotary converter that changes 115 volts D.C. to 110 volts A.C., and a transformer to reduce the 110 volts A.C. to 12 volts. These searchlights can be furnished of entirely non-magnetic construction.

CROUSE-HINDS

Incandescent Searchlights

Long Range

Description (Fig. Nos. below refer to Page 1 of this section)		Maximum Wattage‡		Lamp Receptacle	Shipping Weight	Cat. No.	List, each
		Continuous Service	Intermittent Service				
14-Inch Searchlights							
DCE-14	Trunnion (Fig. 1)	600	1000	Medium Screw Mogul Screw Mogul Prefocus Bipost	84 lbs.	41063 41065 41066 42104	$175.00 175.00 175.00 175.00
DCY-14	Pedestal (Fig. 2)	600	1000	Mogul Prefocus Bipost	130 lbs.	42842 42843	$200.00 200.00
DCX-14	Pilot House Lever Control (Fig. 3)†	600	1000	Mogul Prefocus Bipost	140 lbs.	42844 42846	$240.00 240.00
DCXR-14	Remote Control (Fig. 4)*	600	1000	Mogul Prefocus Bipost	155 lbs.	42845 42847	$240.00 240.00
16-Inch Searchlights							
DCE-16	Trunnion (Fig. 1)	1000	1500	Mogul Screw Mogul Prefocus Bipost	97 lbs.	41353 41354 41983	$200.00 200.00 200.00
DCY-16	Pedestal (Fig. 2)	1000	1500	Mogul Prefocus Bipost	145 lbs.	42848 42849	$225.00 225.00
DCX-16	Pilot House Lever Control (Fig. 3)†	1000	1500	Mogul Prefocus Bipost	155 lbs.	42850 42851	$265.00 265.00
DCXR-16	Remote Control (Fig. 4)*	1000	1500	Mogul Prefocus Bipost	170 lbs.	42852 42853	$265.00 265.00
18-Inch Searchlights							
DCE-18	Trunnion (Fig. 1)	1500	2000	Mogul Screw Mogul Prefocus Bipost	120 lbs.	42148 42149 42150	$330.00 330.00 330.00
DCY-18	Pedestal (Fig. 2)	1500	2000	Mogul Prefocus Bipost	168 lbs.	42854 42855	$355.00 355.00
DCX-18	Pilot House Lever Control (Fig. 3)†	1500	2000	Mogul Prefocus Bipost	178 lbs.	42856 42857	$395.00 395.00
DCXR-18	Remote Control (Fig. 4)*	1500	2000	Mogul Prefocus Bipost	200 lbs.	42858 42859	$395.00 395.00
24-Inch Searchlights§							
DCE-24	Trunnion (Fig. 1)	2000	3000	Mogul Screw Mogul Prefocus Bipost	200 lbs.	42157 41067 41986	$400.00 400.00 400.00
DCY-24	Pedestal (Fig. 2)	2000	3000	Mogul Prefocus Bipost	260 lbs.	42860 42861	$425.00 425.00
DCX-24	Pilot House Lever Control (Fig. 3)†	2000	3000	Mogul Prefocus Bipost	270 lbs.	42862 42863	$465.00 465.00
DCXR-24	Remote Control (Fig. 4)*	2000	3000	Mogul Prefocus Bipost	285 lbs.	42864 42865	$465.00 465.00

Type lamp to be used must be specified when ordering.

Prices do not include incandescent lamps.

*Catalog numbers and list prices of remote control searchlights include the remote control wheel assembly (Fig. 5, page 1), but no cable.

†Length of standard control stem below base is 3 inches. Longer control stems can be furnished at $3.00 list per foot additional.

‡The maximum wattage for each searchlight is given in case lamps other than those recommended on page 3 of this section are used.

§24-inch searchlights can be furnished with automatic lamp-changers for T20-bulb lamps at $110.00 list, additional.

Discounts: Schedule "F"

Incandescent Searchlights

14-Inch, 16-Inch, 18-Inch, 24-Inch—Long Range

Housing: Cast aluminum alloy, dust-tight, and weatherproof.

Reflectors: Commercial precision mirrored glass. Overall Diameters: 14-Inch Units—14 inches; 16-Inch Units—16 inches; 18-Inch Units—19 7/16 inches; 24-Inch Units—25¼ inches. See section 206, page 5.

Mountings: Type DCE, steel trunnion on cast Feraloy base. Type DCX, cast Feraloy pedestal mounting with ball bearings, and lever control. Type DCY, cast Feraloy pedestal mounting with ball bearings, and hand control. Type DCXR, cast Feraloy pedestal mounting with ball bearings and remote control pulleys and wheels.

Lamp Receptacles: Type DCE is listed with Mogul screw, Mogul prefocus, medium screw, or bipost receptacles. Medium prefocus can be furnished. DCX, DCXR, and DCY are listed with Mogul prefocus or bipost receptacle, although the other receptacles can be furnished without additional charge. The bipost and prefocus receptacles are recommended under all conditions, as the searchlight is then focused accurately at the factory and never requires refocusing unless a lamp of different light center length is to be used.

Wiring Connections: Type DCE—three feet of weatherproof cable. Types DCX, DCXR, and DCY—extra flexible leads carry the current from the base to the lamp. A floating stop is provided which allows full 360° rotation horizontally, but prevents continuous rotation which would twist the leads. Slip rings and brushes for continuous rotation can be furnished at an advance of $35.00 in the list prices.

Door Frame: Cast aluminum alloy, hinged to housing.

Door Catches: Four "C" clamps, except 24-inch, which has six.

Lens: Three-section, plate glass. Convex, heat-resisting lenses can be furnished without additional charge, and are recommended where searchlights are permanently installed pointing upwards. Diameters: 14-inch Units—14¾ inches; 16-Inch Units—16 7/16 inches; 18-Inch Units—20 inches; 24-Inch Units—25 inches. See section 206, page 4.

Lamps: See schedule below.

Lamp-Changer: An automatic lamp-changer which throws into focus a spare lamp upon failure of the first lamp, can be furnished with the 24-inch units only. A remote indicating relay can also be furnished to indicate when the operating lamp has failed.

Louvers: Circular louvers or spherical auxiliary reflectors for eliminating all spill light are furnished as standard equipment.

Finish: Aluminum.

Lamps

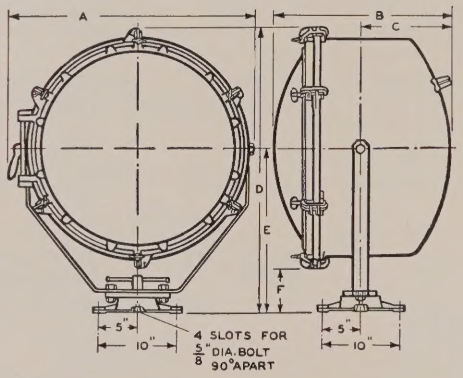
Watts	Bulb	Volts	Life	Service	Base	Burning Position	L.C.L.	Used with Searchlight
For Continuous Service								
250	G-30	115	800	Floodlight	Medium Screw	Any	3″	14″
500	G-40	115	800	Floodlight	Mogul Screw	Any	4¼″	14″, 16″
500	T-20	115	800	Air Beacon	Mogul Prefocus	B.D.*	3 7/16″	14″, 16″
1000	G-40	115	800	Floodlight	Mogul Screw	Any	5 3/16″	16″, 18″, 24″
1000	T-20	115	500	Air Beacon	Bipost	B.D.*	4″	16″, 18″, 24″
1000	T-20	30	500	Air Beacon	Bipost	B.D.*	4″	16″, 18″, 24″
1500	G-48	115	800	Floodlight	Mogul Screw	Any	5¼″	18″, 24″
For Intermittent Service								
420	G-25	12	100	Headlight	Mogul Prefocus	Any	1 11/16″	14″, 16″, 18″, 24″
900	T-20	30	50	Projection	Mogul Prefocus	B.D.*	3 7/16″	14″, 16″, 18″, 24″
1000	T-20	115	50	Projection	Mogul Prefocus	B.D.*	3 7/16″	14″, 16″, 18″, 24″
2000	G-48	115	200	Motion Picture	Bipost	B.D.	5″	18″, 24″

*Searchlight should not be tipped up or down more than 25° with this lamp.

Incandescent Searchlights

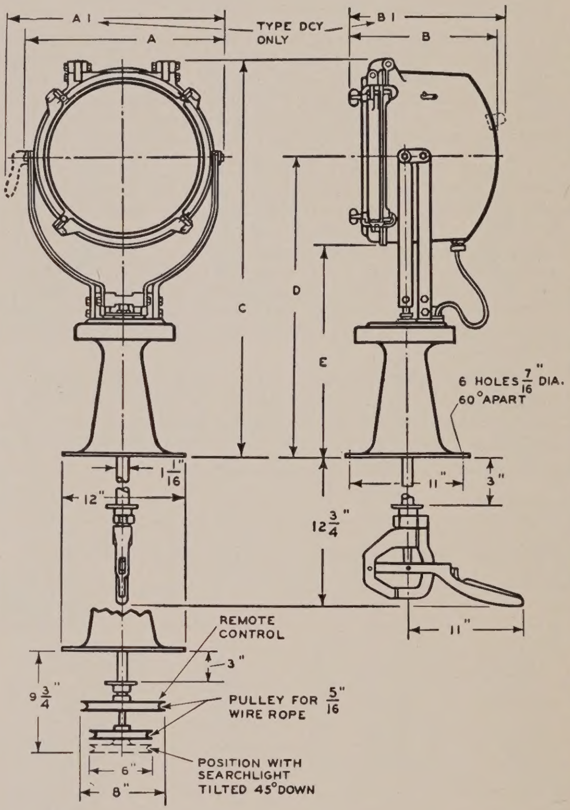
Long Range

Type DCE


A
B
C
D
E
F
5"
10"
4 SLOTS FOR $\frac{5}{8}$" DIA. BOLT 90°APART
5"
10"

Type	A	B	C	D	E	F
DCE-14	20¼	15¼	7⅛	24⅝	15⅜	6
DCE-16	22¼	12½	6¼	26¼	16	6
DCE-18	26⅜	16⅛	8	31	18⅛	6½
DCE-24	30¾	22⅝	11⅝	37½	22⅛	7

Types DCX, DCXR, and DCY


A1
A
TYPE DCY ONLY
B1
B
C
D
E
6 HOLES $\frac{7}{16}$" DIA. 60°APART
1$\frac{1}{16}$"
12"
11"
3"
12$\frac{3}{4}$"
11"
REMOTE CONTROL
3"
9$\frac{3}{4}$"
PULLEY FOR $\frac{5}{16}$" WIRE ROPE
POSITION WITH SEARCHLIGHT TILTED 45°DOWN
6"
8"

Type	A	A1	B	B1
DCX-14, DCXR-14, DCY-14	19¼	20¼	14½	15¼
DCX-16, DCXR-16, DCY-16	20¾	22¼	11⅞	12½
DCX-18, DCXR-18, DCY-18	24½	26⅛	14⅞	16⅛
DCX-24, DCXR-24, DCY-24	30	30¾	22⅝	22⅝

Type	C	D	E
DCX-14, DCXR-14, DCY-14	38⅛	28¾	20⅛
DCX-16, DCXR-16, DCY-16	39¼	29¼	19½
DCX-18, DCXR-18, DCY-18	44	31⅞	19½
DCX-24, DCXR-24, DCY-24	50⅝	35¼	18½

Special Bases and Brackets

For Crouse-Hinds Floodlights

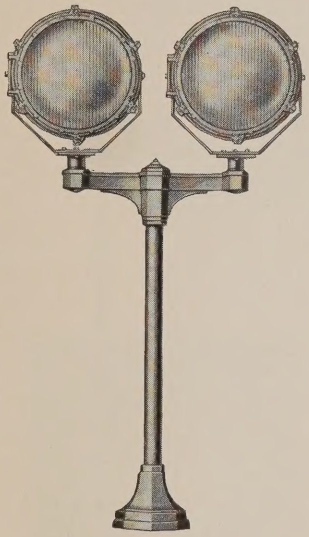


Fig. 1
Two Floodlights on Ornamental Pole Bracket

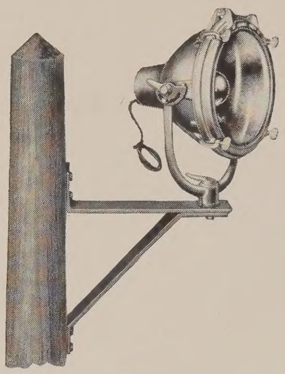


Fig. 2
Floodlight with Pole Bracket

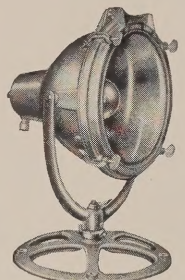


Fig. 3
Floodlight with Wheel Base

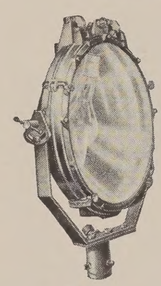


Fig. 4
Floodlight with 2½-Inch Slip Fitter

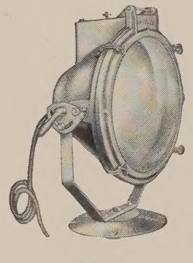


Fig. 5
Floodlight with Cast Aluminum Alloy Wheel Base

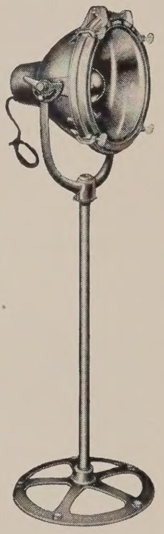


Fig. 6
Floodlight with Pedestal Base

There are cases where one of the special bases or brackets listed on the following page is required for making the best installation of projectors. Each of these has been designed to meet a special type of installation as described in the following paragraphs:

Fig. 7 shows a special bolt base for type ADA-12 floodlight only. It is supplied with a cap screw, ½ x 1¼ inches.

Fig. 8 shows a U-bolt base for types ADE-14 and ADE-16 floodlights. It will clamp the floodlight to any pipe not larger than two inches.

Fig. 9 shows a railroad base for types ADE-14 and ADE-16 floodlights. It is of cast Feraloy, galvanized and has bolt holes in accordance with A. R. E. E. standard for railroad floodlighting towers.

Fig. 10 shows a cast aluminum alloy wheel base (see Fig. 5). This base can only be used with types LCE-1120, LCE-1020, and LCE-24 floodlights.

Fig. 11 shows a large wheel base for types ADE-14 and ADE-16 floodlights (see Fig. 3), 17½ inches in diameter. This base is used principally on portable projectors so that they cannot be tipped over when set on uneven surfaces.

Fig. 12 shows an ornamental pole base for use with four-inch pipe. It can be furnished either tapped for four-inch pipe or slip fitter for four-inch pipe. The slip-fitter type is used on tall poles which must be set in a concrete foundation.

Fig. 13 shows an ornamental cast Feraloy bracket arm with a slip fitter for four-inch pipe (see Fig. 1). It can be used with standard four-inch pipe and Cat. No. 45889 ornamental base as shown in Fig. 12, or on top of a standard ornamental street lighting pole. The bracket arm is hollow and a detachable plate on the center makes wiring easy.

Fig. 14 shows a pole bracket. This bracket is made of bar iron. The pole ends of the bracket and brace are drilled for use with ⅝-inch lag screws.

Fig. 15 shows a slip fitter for 2½-inch pipe (see Fig. 4). This base can only be used with types LCE-1120, LCE-1020, LCE-24, and DCE-24 floodlights. It is furnished with a CGB295 connector or stuffing box with a rubber bushing which will clamp flexible cord from ½ to ⅝ inch diameter.

Fig. 16 shows a pedestal base for types ADE-14 and ADE-16 floodlights (see Fig. 6) of sufficient height to bring the center of the projector approximately 4½ feet from the base. This can be supplied, at a slight increase in cost, with pedestal of any height desired. A base of this type is particularly suitable for a projector used in construction work.

Special Bases and Brackets

For Crouse-Hinds Floodlights

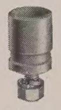


Fig. 7
Bolt Base

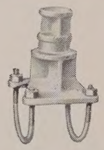


Fig. 8
U-bolt Base

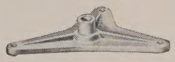


Fig. 9
Railroad Base

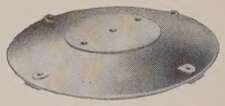


Fig. 10
Cast Aluminum Alloy Wheel Base

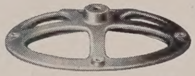


Fig. 11
Wheel Base

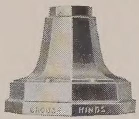


Fig. 12
Ornamental Pole Base

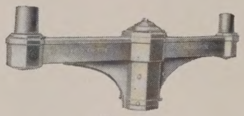


Fig. 13
Ornamental Bracket

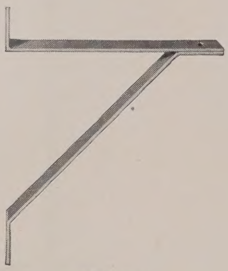


Fig. 14
Pole Bracket

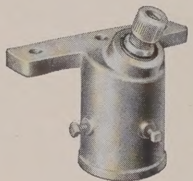


Fig. 15
2½-Inch Slip Fitter

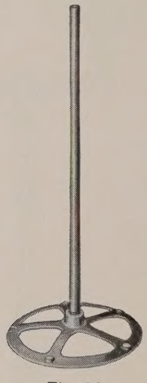


Fig. 16
Pedestal Base

When any one of these special bases or brackets is ordered with a projector, the catalog number and list price of the particular base or bracket should be added to the catalog number and list price of the projector.

Style		For Floodlights	Cat. No.	List, each	
				When Purchased Separately	When Purchased with Projector in place of Regular Base
		Bases			
Bolt	(Fig. 7)	ADA-12	HL3526	$ 2.50	No Extra
Ornamental Threaded " Slip Fitter	(Fig. 12)	. . . .	45669 45889	$17.00 17.00	. . . .
Pedestal	(Fig. 16)	ADE-14, ADE-16	HL3720	$ 5.00	Add $2.00
Railroad	(Fig. 9)	ADE-14, ADE-16	HL2693	$ 3.00	No Extra
Slip Fitter	4-Inch 2½-Inch (Fig. 15)	LCE-1120, LCE-1020, LCE-24 LCE-1120, LCE-1020, LCE-24	HL3247 HL3681	$ 6.00 6.00	No Extra No Extra
U-bolt	(Fig. 8)	ADE-14, ADE-16	HL2714	$ 3.75	No Extra
Wheel	(Fig. 10) (Fig. 11)	LCE-1120, LCE-1020, LCE-24 ADE-14, ADE-16	HL9462 HL5608	$ 9.00 3.00	No Extra No Extra
		Brackets			
Ornamental‡	(Fig. 13)	For Two LCE-1120, LCE-1020, LCE-24, or DCE-24 For Two ADE-14 or ADE-16	HL3123 HL3685	$32.00 32.00	. . . .
Pole	(Fig. 14)	LCE-1120, LCE-1020, LCE-24 ADE-14, ADE-16	HL2630 HL2632	$ 9.00 7.50	No Extra No Extra

‡When used with types LCE-1020, LCE-24, or DCE-24, purchase floodlights with HL3681 slip-fitter base. When used with type ADE, purchase floodlights with slip-fitter mounting.

Discounts: Schedule "F" (except 45669 and 45889 which are Schedule "T" discounts)

Lenses

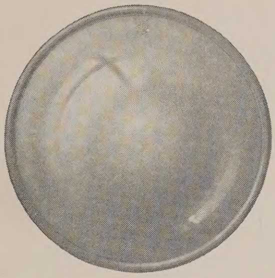


Fig. 1
Plain Lens

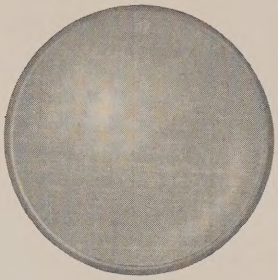


Fig. 2
Diffusing Lens

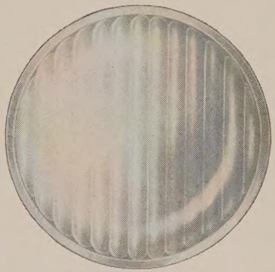


Fig. 3
Spread Lens

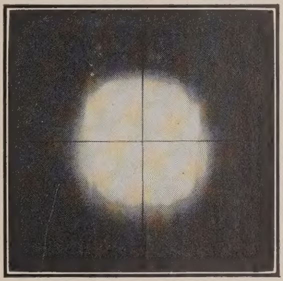


Fig. 4
Light Spot with Plain Lens

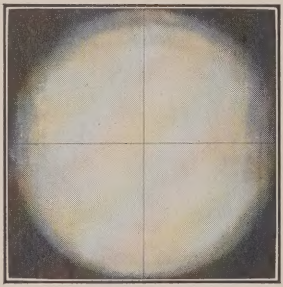


Fig. 5
Corresponding Light Spot
With Diffusing Lens

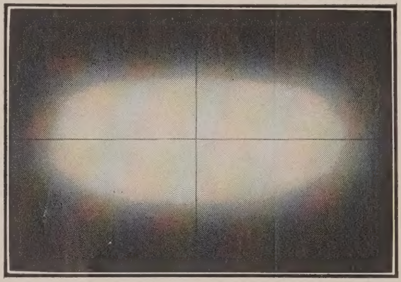


Fig. 6
Corresponding Light Spot
With Spread Lens

Standard Plain Lenses: Most Crouse-Hinds floodlights are supplied as standard equipment with plain, convex, Pyrex, heat-resisting lenses. Unless another lens is specified on the order, plain lens will be furnished. The plain lens does not alter the beam spread of the floodlight in any way.

Light Control Lenses: It is often desirable to increase the natural spread of a floodlight beam either in all directions or in one direction only. To meet this condition, the Crouse-Hinds Company can supply two different types of lenses as described below. There is no additional charge for these lenses, if specified on the order.

Diffusing Lenses: The convex, heat-resisting, diffusing lens is shown in Fig. 2. This lens spreads the natural beam both horizontally and vertically, giving a larger light spot, as shown in Fig. 5. This lens is used where the natural spread from the floodlight is not sufficient to cover the area desired.

Spread Lenses: The convex, heat-resisting, spread lens is shown in Fig. 3. This lens spreads the light at right angles to the direction of the ribs, leaving the spread in the other direction the same. The resulting beam is elliptical in shape, as shown in Fig. 6. When the ribs are vertical, the beam is spread horizontally and when they are horizontal, the beam is spread vertically. The lens can be set at the factory for either spread, and the order should specify which is desired. This type of lens is very useful when lighting rectangular areas. The nominal beam spread produced with the standard spread lens is 45 to 50°. The actual beam spread depends on the characteristics of the floodlight with which the lens is used.

Lenses

To obtain the catalog number and list price of any lens, first refer to Table No. 1 and obtain the diameter of the lens required to fit the floodlight; then under Table No. 2 will be found the catalog number and list price of the style lens of that diameter.

Table No. 1—Lens Diameters

Type	Diameter	Type	Diameter	Type	Diameter	Type	Diameter
ADA-12	12″	DCX-16†	16 7/16″	FDE-14	14″	MDB-10	10″
ADA-14	14″	DCX-18†	20″	FDE-16	16 7/16″	MDB-14	14″
ADA-16	16 7/16″	DCX-24†	25″	FDS-12	12″	MDB-16	16 7/16″
ADE-12	12″	DCXR-14†	14¾″	FDS-14	14″	RM-10	10″
ADE-14	14″	DCXR-16†	16 7/16″	FDS-16	16 7/16″	RM-12	12″
ADE-16	16 7/16″	DCXR-18†	20″	FDV-12	12″	RME-10	10″
ADR-12	12″	DCXR-24†	25″	FDV-14	14″	RME-12	12″
ADR-14	14″	DCY-14†	14¾″	FDV-16	16 7/16″	RMF-12	12″
DCE-14†	14¾″	DCY-16†	16 7/16″	LCE-20	20″	RMU-10	10″
DCE-16†	16 7/16″	DCY-18†	20″	LCE-24	24½″	RMU-12	12″
DCE-18†	20″	DCY-24†	25″	LCE-1020	20″	TTE	15 1/16″
DCE-24†	25″	FCS-8	8⅜″	LCE-1120	20″		
DCX-14†	14¾″	FDE-12	12″	MDB-8	8⅜″		

Table No. 2—Lens Prices

Diameter	Color	Cat. No.			List, each	
		Plain	Spread	Diffusing	Purchased Separately	Additional, if Supplied in Floodlight
8⅜″	Clear	HL5375	HL5376	HL5377	$ 1.70	No Extra
10″	Clear	HL6813	HL6815	HL6814	3.50	No Extra
12″	Clear	HL6802	HL6811	HL6803	5.00	No Extra
12″	Red	HL2005	HL2016	HL2012	8.00	$3.00
12″	Amber	HL8130	HL2019	HL2015	8.00	3.00
12″	Green	HL2009	HL2018	HL2014	8.00	3.00
12″	Blue	HL2006	HL2017	HL2013	8.00	3.00
12″	Purple	HL2051	HL2054	HL2052	8.00	3.00
14″	Clear	HL9151	HL3090	HL9153	6.50	No Extra
†14¾″	Clear	HL5868	....	....	7.00	No Extra
15 1/16″	Clear	HL8738	HL651	HL650	8.00	No Extra
16 7/16″	Clear	HL6804	HL6810	HL6805	9.50	No Extra
†16 7/16″	Clear	HL5867	....	....	9.50	No Extra
20″	Clear	HL9016	HL9018	HL9017	17.00	No Extra
†20″	Clear	HL5869	....	....	17.00	No Extra
24½″	Clear	HL9019	HL9021‡	HL9020*	35.00	No Extra
25″	Clear	HL2156	HL2153‡	....	40.00	No Extra
†25″	Clear	HL5865	....	....	40.00	No Extra

Table No. 3—Color Screens

Floodlights using 500-watt or larger lamps can be furnished with heat-resisting glass color screens. These screens are placed inside the floodlight, behind the clear lens. 12-inch projectors can be furnished with colored, heat-resisting lenses in place of the clear glass lenses, for an addition of $3.00 list. See listing above.

Diameter	Color	Cat. No.	List, each	Diameter	Color	Cat. No.	List, each
12″	Red	HL5591	$6.00	14″	Green	HL3241	$ 9.00
12″	Amber	HL5592	6.00	14″	Blue	HL3242	9.00
12″	Green	HL5593	6.00	16 7/16″	Red	HL241	13.00
12″	Blue	HL5594	6.00	16 7/16″	Amber	HL244	13.00
14″	Red	HL3239	9.00	16 7/16″	Green	HL242	13.00
14″	Amber	HL3240	9.00	16 7/16″	Blue	HL243	13.00

Cement for Lenses

The lenses of most Crouse-Hinds floodlights are cemented to the door with a special plastic cement which does not dry out. The amount of cement required for the various sizes of lenses is as follows:

Lens Diameter	Approximate Cement Required	Lens Diameter	Approximate Cement Required
12″	4 oz.	20″	10 oz.
14″	5 oz.	24″	12 oz.
16″	8 oz.		

Cement for Lenses	Cat. No. HL9012	$1.25 per pound, list price

‡HL9021 and HL2153 are 40° spread lenses; HL9314, 80°, 24½-inch spread lens or HL2154, 80°, 25-inch spread lens can be furnished at the same price.

*HL9020 diffusing lens has a 50° spread; HL2748, 90° diffusing lens will be furnished at the same price.

†Three-section, plate glass lenses.

Discounts: Schedule "F"

Reflectors

For the majority of floodlights, the Crouse-Hinds Company lists two types of reflectors: narrow and wide beam.

The narrow beam reflector is usually used with the G-bulb Floodlight Service lamps. The light distribution characteristics of each are given in section 208, page 3.

The wide beam reflector is used principally in conjunction with PS-bulb General Lighting Service lamps.

Most enclosed floodlights are listed with both silvered glass and specular (polished) Alzak aluminum reflectors. The Alzak reflectors are particularly recommended for resistance to mechanical breakage and for high temperature conditions.

Diameter	Used on Types	Silvered Glass	Polished Alzak	List, each
		Cat. No.	Cat. No.	
	Narrow Beam Reflectors			
8″	FCS-8, RCD-8, RCDE-8	......	KL662	$ 6.25
9⅝″	RM-10, RME-10, RMU-10	HL6035	KL685	9.00
11½″	ADA-12 (also old style ADR-12)	HL439	KL663	9.00
11½″	LCE-1020—Rear Section	HL2898	KL669	12.00
12″	ADE-12, ADR-12 (new style)	......	KL133	15.00
12″	RM-12, RME-12, RMF-12, RMU-12	......	KL686	14.00
14″	ADA-14, ADE-14, ADR-14, FDE-14, FDS-14, FDV-14	HL2889	HL6978	21.00
14″	DCE-14, DCX-14, DCXR-14, DCY-14	HL9452	......	50.00
14″	GCP-14	HL4250	......	22.00
16″	ADA-16, ADE-16, FDE-16, FDS-16, FDV-16	HL2337	KL235	23.00
16″	DCE-16, DCX-16, DCXR-16, DCY-16	HL4132	......	65.00
18″	DCE-18, DCX-18, DCXR-18, DCY-18	HL5760	......	85.00
20″	LCE-1020—Front Section	......	KL670	33.00
20″	LCE-1120	HL4481	KL210	35.00
24″	LCE-24	HL8518	KL665	45.00
24″	DCE-24, DCX-24, DCXR-24, DCY-24	HL9875	......	130.00
	Wide Beam Reflectors			
11½″	ADA-12 (also old style ADR-12)	HL749	KL664	$ 9.00
12″	ADE-12, ADR-12 (new style)	......	KL144	15.00
14″	ADA-14, ADE-14, ADR-14	HL2890	KL673	21.00
14″	GCP-14	HL3862	......	22.00
16″	ADE-16. For PS-bulb lamp	HL5588	KL619	23.00
19½″	LCE-20	HL9118	......	40.00
20″	LCE-1120	HL4482	KL674	40.00
24″	LCE-24	HL9119	KL675	45.00
	Etched Alzak Reflectors			
8″	RCD-8, RCDE-8	KL666		$ 3.00
10″	RM-10, RME-10, RMU-10	KL667		5.00
12″	RM-12, RME-12, RMF-12, RMU-12	KL668		7.00

Hoods

When floodlights are used for the lighting of railway or industrial yards, the area between the floodlight location and the point where the main beam strikes may often be quite dark unless auxiliary floodlights are used to light this area. If this area is of great importance it should be lighted with separate floodlights, but if only a small amount of light is required in this area, it can often be obtained by using hoods on the floodlights. These hoods redirect part of the spill rays above the main beam to the ground.

Hoods also provide a cutoff of the top of the beam, and prevent glare. They are often used for this purpose in athletic field lighting.

Used on Types	Material	Cat. No.	List, each
ADA-12	Sheet Aluminum	KL738	$ 4.50
ADE-12	Cast Aluminum	KL607	4.50
ADE-14	Sheet Aluminum	HL3399	7.00
ADE-16	Sheet Aluminum	HL3214	7.00
LCE-20	Sheet Aluminum	HL3538	10.00
LCE-24	Sheet Aluminum	HL8706	12.00
LCE-1020	Sheet Aluminum	HL3396	10.00
LCE-1120	Sheet Aluminum	HL3396	10.00
RM-10, RMU-10	Porcelain	HL9093	6.50
*RM-12, RMU-12	Porcelain	HL8622	*

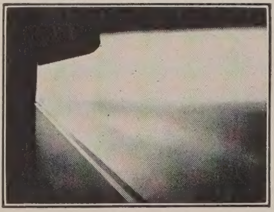


Fig. 1
Beam of Floodlight with Hood

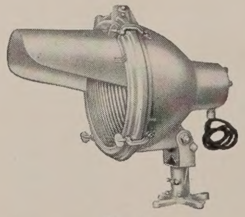


Fig. 2
Floodlight with Hood

*Hood cast as part of door frame and fits types RM, RMU, and RME only, add $13.00 to list price of floodlight.

Discounts: Schedule "F"

Louvers

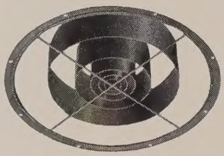


Fig. 3
Circular Louvers

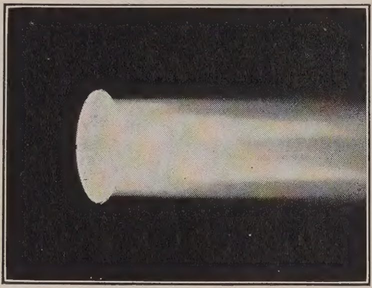


Fig. 4
Beam of Floodlight with Circular Louvers

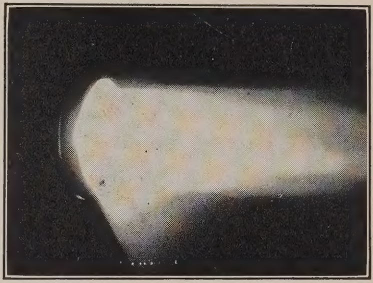


Fig. 5
Beam of Floodlight with Top Louvers

In many floodlight installations, it is desirable to obtain a sharp cutoff on one or more sides of the beam; and in some cases it is necessary to eliminate the spill light in order to prevent glare. Louvers control the direct lamp rays only, which rays (outside of the main beam) are usually valueless, except in cases where they may light the area between the floodlight and the point where the main beam strikes. Circular louvers are recommended for most installations as they also tend to obstruct stray light from the reflector, which may be objectionable. Louvers for cutoff on one side only can be furnished.

Louvers cannot make a wide beam narrow or materially reduce the natural beam spread of a floodlight. In cases where the natural spread of a floodlight illuminates a larger area than is desired, such as when spotting a small or narrow object from a distance, light spilled over the object is objectionable, and a narrower beam unit should be used. A narrow beam for such purposes can be obtained either with concentrated filament lamps or long focus reflectors, or a combination of both. Sometimes it is necessary to use low voltage lamps to obtain sufficient filament concentration.

Circular Louvers

Used on Types	Cat. No.	List, each	Used on Types	Cat. No.	List, each
ADA-12, ADR-12	HL2472	$ 6.75	ADE-16	KL627	$10.00
ADA-14, ADE-14, ADR-14 . . .	HL3261	10.00	LCE-24	HL2667	20.00
ADE-12	KL661	6.75	LCE-1020, LCE-1120	HL3328	17.00

Installation: Louvers are attached to the inside of the door frame with the same clips that hold the lens in the door.

Lamp Receptacles

Type Floodlight	Type Receptacle	Cat. No.	List, each
ADA-12	Med. Scr.	HL8509	$ .75
ADA-14	Mog. Scr.	HL2128	2.00
ADA-16	Mog. Scr.	HL2128	2.00
ADA-16	Mog. Scr.	HL8751	1.50
ADE-12, ADR-12	Med. Scr.	HL6019	.60
ADE-14	Mog. Scr.	HL2128, PS-Lamp	2.00
ADE-14	Mog. Scr.	HL8751, G-Lamp	1.50
ADE-16	Mog. Scr.	HL2128, PS-Lamp	2.00
ADE-16	Mog. Scr.	HL8751, G-Lamp	1.50
ADR-12	Med. Scr.	HL8509	.75
ADR-14	Mog. Scr.	HL2128	2.00
DCE, DCX DCXR, and DCY All Sizes	Med. Pref.	HL3727	3.00
	Med. Scr.	HL6019	.60
	Mog. Pref.	HL3251 Old Style	7.00
	Mog. Pref.	#601-A New Std.	6.50
	Mog. Scr.	HL7136	1.70
	Mog. Bipost	KL577	6.00
FCS-8	Med. Scr.	HL9131	1.25
FDE, FDS FDV	Mog. Scr.	HL7136	1.70
GCP-14	Med. Scr.	HL6019 Aux.	.60
GCP-14	Mog. Scr.	HL2128 Main	2.00
GCP-14	Mog. Scr.	HL8751 Form C	1.50
LCE-12	Med. Scr.	HL9131	1.25
LCE-16	Mog. Scr.	HL8751	1.50
LCE-20	Mog. Scr.	HL8751	1.50
LCE-24	Mog. Scr.	HL8751	1.50
LCE-1020	Mog. Scr.	HL8751, G-Lamp	1.50

Type Floodlight	Type Receptacle	Cat. No.	List, each
LCE-1020	Mog. Scr.	HL7012, PS-Lamp	$1.25
LCE-1120	Mog. Scr.	HL7012	1.25
MDA-1	Mog. Scr.	HL7012	1.25
MDB-8	Med. Scr.	HL4203	.60
MDB-10	Med. Scr.	HL4203	.60
MDB-14	Mog. Scr.	HL7012 Old Style	1.25
MDB-14	Mog. Scr.	HL5298 New Std.	1.50
MDB-16	Mog. Scr.	HL7012 Old Style	1.25
MDB-16	Mog. Scr.	HL5298 New Std.	1.50
MDS-18	Mog. Scr.	HL7012	1.25
MPA-1	Mog. Scr.	HL7012	1.25
MPA-2	Mog. Scr.	HL7012	1.25
MSA-1	Mog. Scr.	HL2128	2.00
MUA	Mog. Scr.	HL5989	1.25
RAS-12	Med. Scr.	#1325	1.25
RAS-14	Med. Scr.	#1325	1.25
RAS-16	Mog. Scr.	#1330	1.50
RCD-8	Med. Scr.	HL6019	.60
RCDE-8	Med. Scr.	HL6019	.60
RLS-12	Med. Scr.	HL8079	1.25
RLS-16	Mog. Scr.	HL7012	1.25
RLU-12	Med. Scr.	HL8079	1.25
RLU-16	Mog. Scr.	HL7012	1.25
RM	Med. Scr.	HL674	.75
RME	Med. Scr.	HL674	.75
RMU	Med. Scr.	HL674	.75
TTE	Mog. Scr.	HL5298	1.50
VCD-6	Med. Pref.	HL3727	3.00
VCD-12	Med. Pref.	HL3727	3.00

Med. Scr.—Medium Screw. Mog. Scr.—Mogul Screw. Med. Pref.—Medium Prefocus. Mog. Pref.—Mogul Prefocus.

Discounts: Schedule "F"

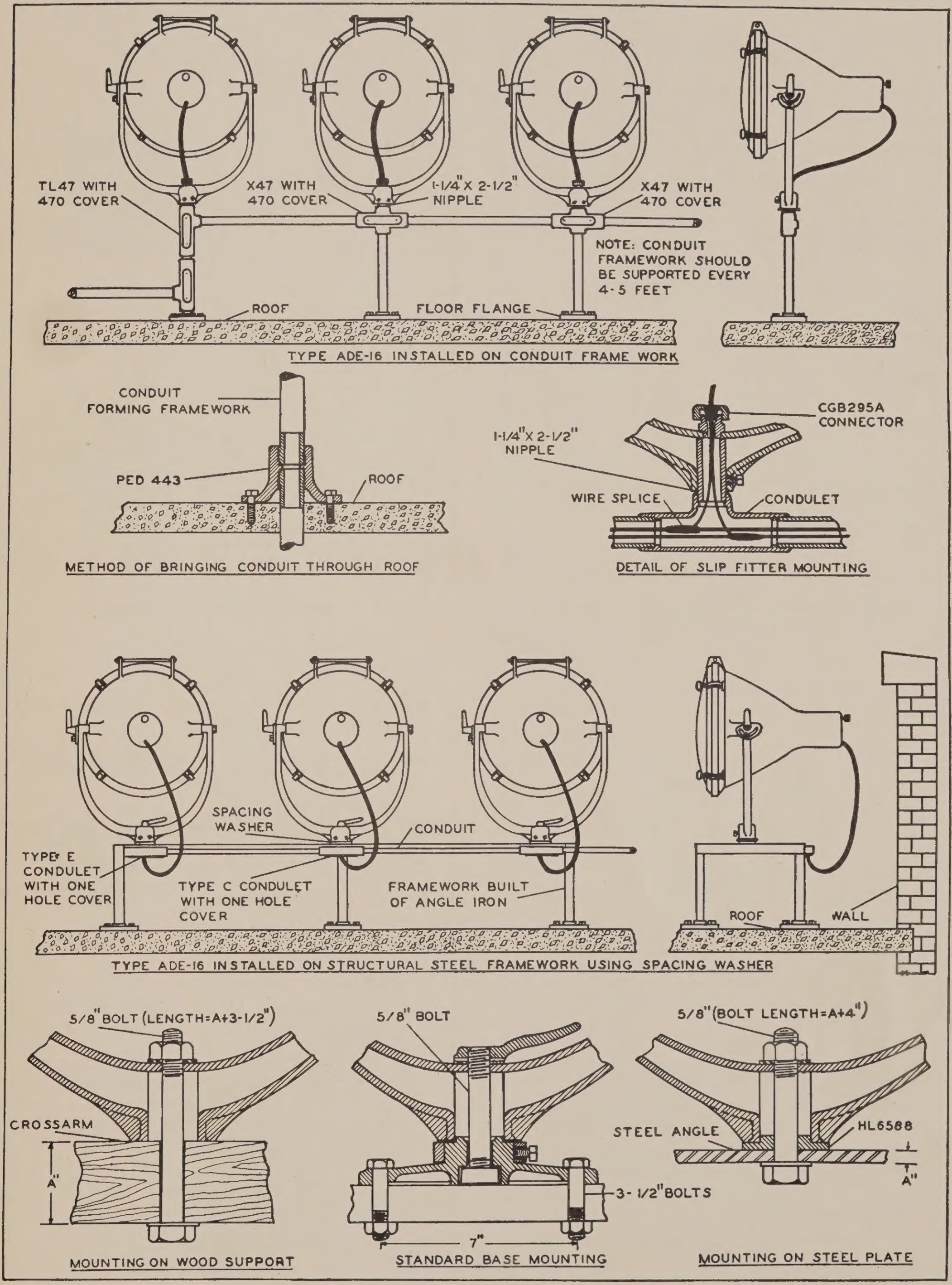

TL47 WITH 470 COVER
X47 WITH 470 COVER
1-1/4" X 2-1/2" NIPPLE
X47 WITH 470 COVER
NOTE: CONDUIT FRAMEWORK SHOULD BE SUPPORTED EVERY 4-5 FEET
ROOF
FLOOR FLANGE
TYPE ADE-16 INSTALLED ON CONDUIT FRAME WORK
CONDUIT FORMING FRAMEWORK
PED 443
ROOF
METHOD OF BRINGING CONDUIT THROUGH ROOF
CGB295A CONNECTOR
1-1/4" X 2-1/2" NIPPLE
WIRE SPLICE
CONDULET
DETAIL OF SLIP FITTER MOUNTING
SPACING WASHER
CONDUIT
TYPE E CONDULET WITH ONE HOLE COVER
TYPE C CONDULET WITH ONE HOLE COVER
FRAMEWORK BUILT OF ANGLE IRON
ROOF
WALL
TYPE ADE-16 INSTALLED ON STRUCTURAL STEEL FRAMEWORK USING SPACING WASHER
5/8" BOLT (LENGTH=A+3-1/2")
CROSSARM
A"
MOUNTING ON WOOD SUPPORT
5/8" BOLT
3- 1/2" BOLTS
7"
STANDARD BASE MOUNTING
5/8" (BOLT LENGTH=A+4")
STEEL ANGLE
HL6588
A"
MOUNTING ON STEEL PLATE

Fig. 1
Installation Details of Types ADE-14 and ADE-16 Floodlights
For Building Lighting

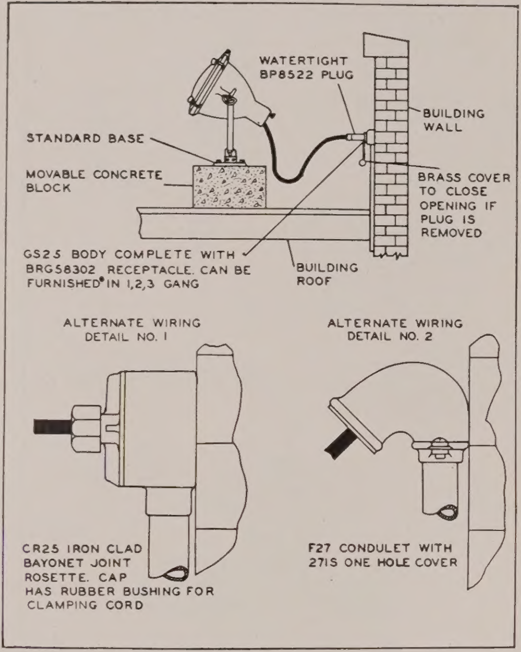
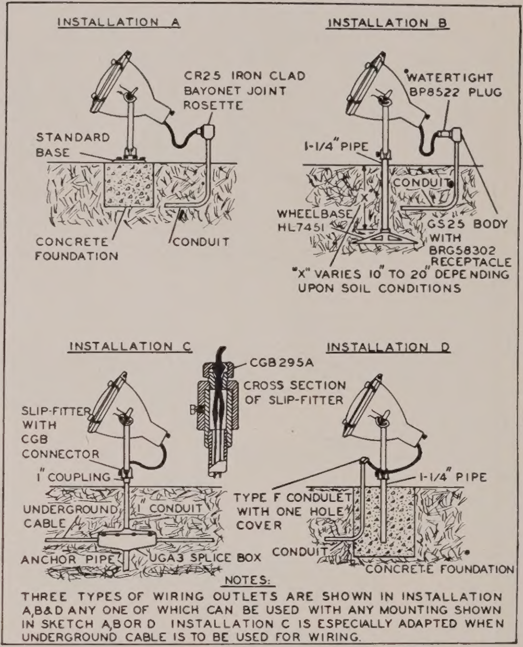

WATERTIGHT BP8522 PLUG
BUILDING WALL
STANDARD BASE
MOVABLE CONCRETE BLOCK
BRASS COVER TO CLOSE OPENING IF PLUG IS REMOVED
GS25 BODY COMPLETE WITH BRG58302 RECEPTACLE. CAN BE FURNISHED IN 1,2,3 GANG
BUILDING ROOF
ALTERNATE WIRING DETAIL NO. 1
ALTERNATE WIRING DETAIL NO. 2
CR25 IRON CLAD BAYONET JOINT ROSETTE. CAP HAS RUBBER BUSHING FOR CLAMPING CORD
F27 CONDULET WITH 271S ONE HOLE COVER

Fig. 2
Floodlights Installed on Movable Concrete Blocks
No Cutting of Roof Necessary


INSTALLATION A
CR25 IRON CLAD BAYONET JOINT ROSETTE
STANDARD BASE
CONCRETE FOUNDATION
CONDUIT
INSTALLATION B
WATERTIGHT BP8522 PLUG
1-1/4" PIPE
CONDUIT
X
WHEELBASE HL7451
GS25 BODY WITH BRG58302 RECEPTACLE
"X" VARIES 10" TO 20" DEPENDING UPON SOIL CONDITIONS
INSTALLATION C
CGB295A
CROSS SECTION OF SLIP-FITTER
SLIP-FITTER WITH CGB CONNECTOR
1" COUPLING
UNDERGROUND CABLE
1" CONDUIT
ANCHOR PIPE
UGA3 SPLICE BOX
INSTALLATION D
1-1/4" PIPE
TYPE F CONDULET WITH ONE HOLE COVER
CONDUIT
CONCRETE FOUNDATION

NOTES:
THREE TYPES OF WIRING OUTLETS ARE SHOWN IN INSTALLATION A,B&D ANY ONE OF WHICH CAN BE USED WITH ANY MOUNTING SHOWN IN SKETCH A,B OR D INSTALLATION C IS ESPECIALLY ADAPTED WHEN UNDERGROUND CABLE IS TO BE USED FOR WIRING.

Fig. 3
Floodlights Installed on Ground

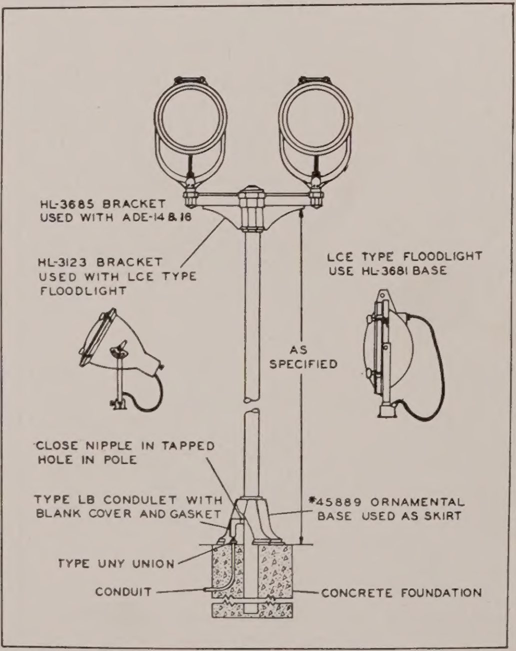

HL-3685 BRACKET USED WITH ADE-14 & 16
HL-3123 BRACKET USED WITH LCE TYPE FLOODLIGHT
LCE TYPE FLOODLIGHT USE HL-3681 BASE
AS SPECIFIED
CLOSE NIPPLE IN TAPPED HOLE IN POLE
TYPE LB CONDULET WITH BLANK COVER AND GASKET
#45889 ORNAMENTAL BASE USED AS SKIRT
TYPE UNY UNION
CONDUIT
CONCRETE FOUNDATION

Fig. 4
Installation Details of Ornamental Bracket Arm

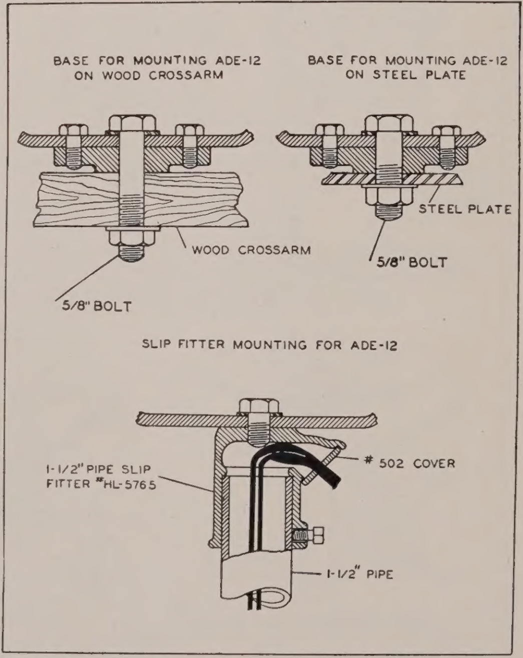

BASE FOR MOUNTING ADE-12 ON WOOD CROSSARM
BASE FOR MOUNTING ADE-12 ON STEEL PLATE
WOOD CROSSARM
5/8" BOLT
STEEL PLATE
5/8" BOLT
SLIP FITTER MOUNTING FOR ADE-12
# 502 COVER
1-1/2" PIPE SLIP FITTER #HL-5765
1-1/2" PIPE

Fig. 5
Installation Details of ADE-12 Mounting

FIG. 1

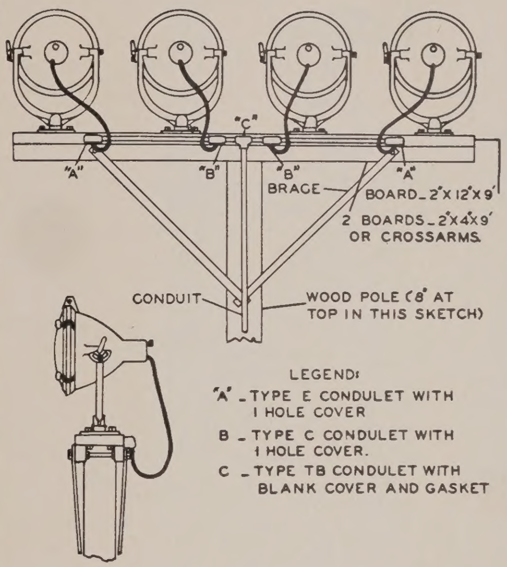

"C"
"A"
"B"
"B"
"A"
BRACE
BOARD_2"X 12"X 9'
2 BOARDS_2"X4"X9'
OR CROSSARMS.
CONDUIT
WOOD POLE (8" AT
TOP IN THIS SKETCH)
LEGEND:
"A" _TYPE E CONDULET WITH
1 HOLE COVER
B _TYPE C CONDULET WITH
1 HOLE COVER.
C _TYPE TB CONDULET WITH
BLANK COVER AND GASKET

FIG. 2

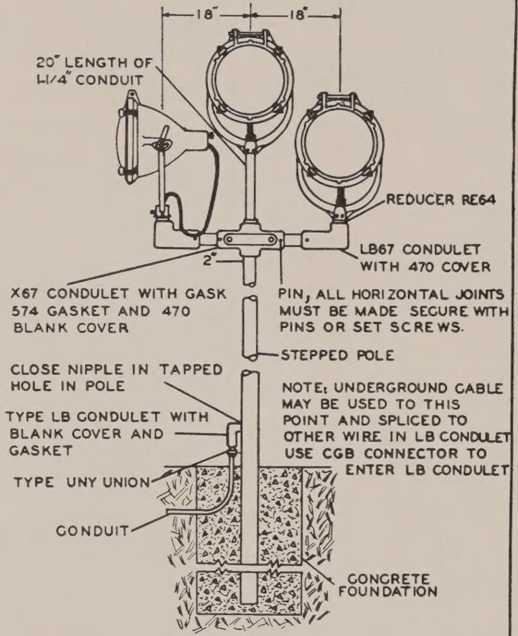

18"
18"
20" LENGTH OF
1-1/4" CONDUIT
REDUCER RE64
LB67 CONDULET
WITH 470 COVER
2"
X67 CONDULET WITH GASK
574 GASKET AND 470
BLANK COVER
PIN, ALL HORIZONTAL JOINTS
MUST BE MADE SECURE WITH
PINS OR SET SCREWS.
STEPPED POLE
CLOSE NIPPLE IN TAPPED
HOLE IN POLE
NOTE: UNDERGROUND CABLE
MAY BE USED TO THIS
POINT AND SPLICED TO
OTHER WIRE IN LB CONDULET
USE CGB CONNECTOR TO
ENTER LB CONDULET
TYPE LB CONDULET WITH
BLANK COVER AND
GASKET
TYPE UNY UNION
CONDUIT
CONCRETE
FOUNDATION

FIG. 3

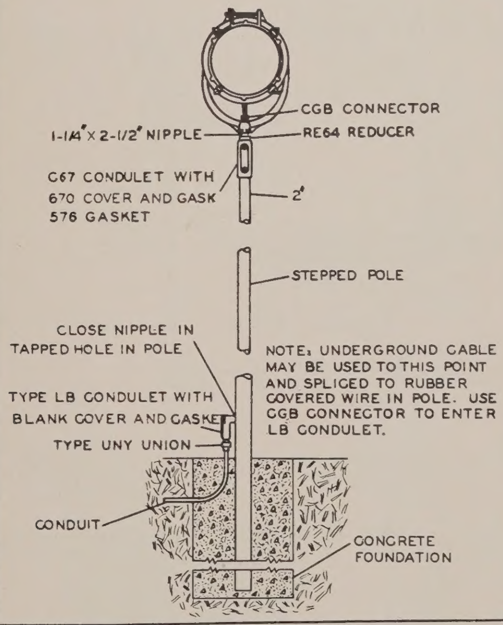
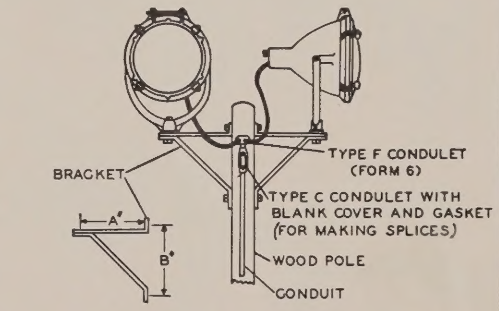

CGB CONNECTOR
1-1/4"X 2-1/2" NIPPLE
RE64 REDUCER
C67 CONDULET WITH
670 COVER AND GASK
576 GASKET
2"
STEPPED POLE
CLOSE NIPPLE IN
TAPPED HOLE IN POLE
NOTE: UNDERGROUND CABLE
MAY BE USED TO THIS POINT
AND SPLICED TO RUBBER
COVERED WIRE IN POLE. USE
CGB CONNECTOR TO ENTER
LB CONDULET.
TYPE LB CONDULET WITH
BLANK COVER AND GASKET
TYPE UNY UNION
CONDUIT
CONCRETE
FOUNDATION

FIG. 4

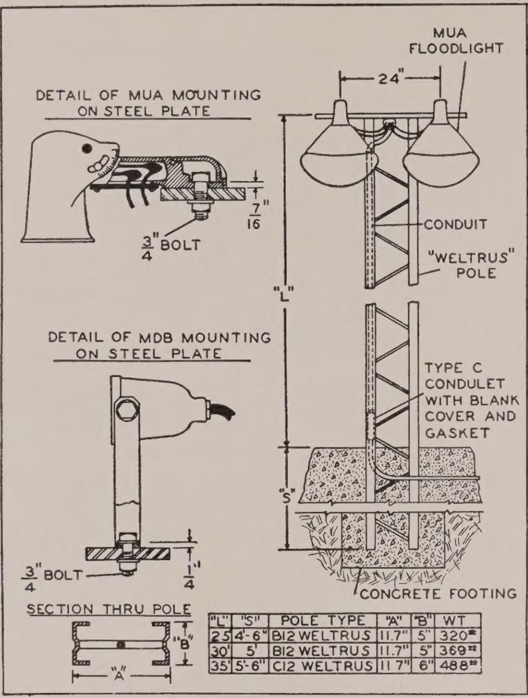

TYPE F CONDULET
(FORM 6)
BRACKET
TYPE C CONDULET WITH
BLANK COVER AND GASKET
(FOR MAKING SPLICES)
"A"
"B"
WOOD POLE
CONDUIT

MOUNTING DETAILS

FOR TYPE FLOODLIGHT	BRACKET NUMBER	DIM. A	DIM. B	MOUNTING HOLES NO.	MOUNTING HOLES SIZE
ADE-12 ADE-14 ADE-16	HL2632	16"	19"	2	11/16"
LCE-20 LCE-1020 LCE-24	HL2630	18"	19"	4	11/16"

NOTE: SPACING OF HOLES SHOWN ABOVE IS APPROXIMATE
COMPLETE DIMENSIONAL DRAWINGS SENT UPON REQUEST

Fig. 1
Installation Details of Types ADE-14 and ADE-16 Floodlights on Wood and Steel Poles


DETAIL OF MUA MOUNTING ON STEEL PLATE
7/16"
3/4" BOLT
MUA FLOODLIGHT
24"
CONDUIT
"WELTRUS" POLE
"L"
TYPE C CONDULET WITH BLANK COVER AND GASKET
"S"
CONCRETE FOOTING
DETAIL OF MDB MOUNTING ON STEEL PLATE
3/4" BOLT
1/4"
SECTION THRU POLE
"B"
"A"

"L"	"S"	POLE TYPE	"A"	"B"	WT
25	4'-6"	B12 WELTRUS	11.7"	5"	320#
30'	5'	B12 WELTRUS	11.7"	5"	369#
35'	5'-6"	C12 WELTRUS	11 7"	6"	488#

Fig. 2
Installation Details of Types MUA and MDB
Mounted on "Weltrus" Pole

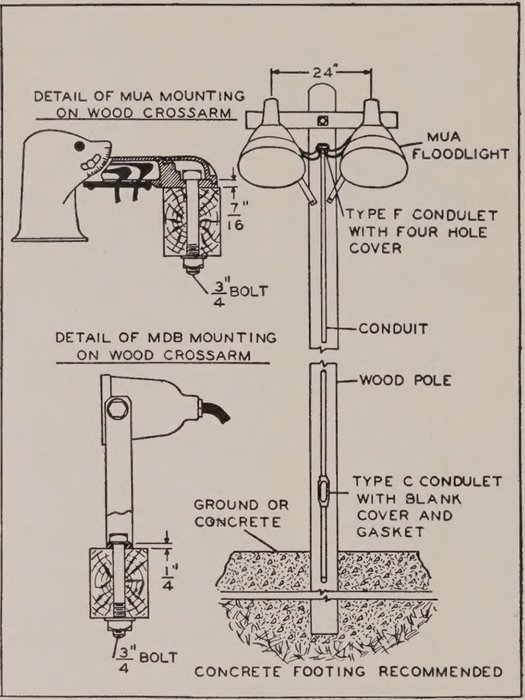

DETAIL OF MUA MOUNTING ON WOOD CROSSARM
24"
MUA FLOODLIGHT
7/16"
3/4" BOLT
TYPE F CONDULET WITH FOUR HOLE COVER
CONDUIT
DETAIL OF MDB MOUNTING ON WOOD CROSSARM
WOOD POLE
TYPE C CONDULET WITH BLANK COVER AND GASKET
GROUND OR CONCRETE
1/4"
3/4" BOLT
CONCRETE FOOTING RECOMMENDED

Fig. 3
Installation Details of Types MUA and MDB
Mounted on Wood Pole

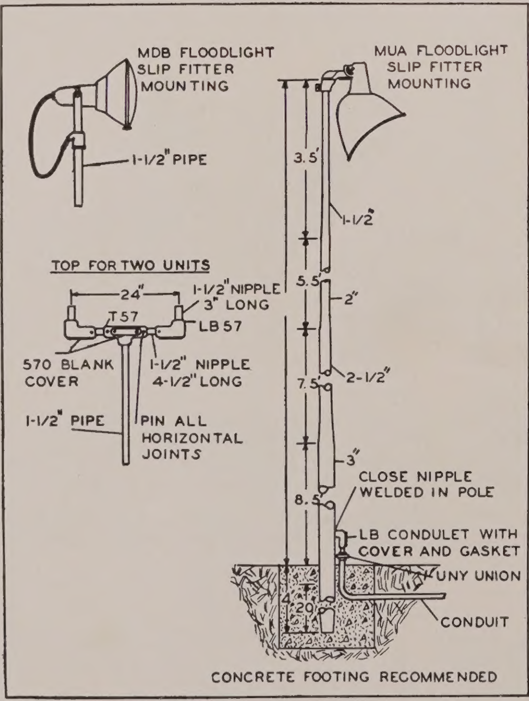

MDB FLOODLIGHT SLIP FITTER MOUNTING
1-1/2" PIPE
MUA FLOODLIGHT SLIP FITTER MOUNTING
3.5'
1-1/2"
TOP FOR TWO UNITS
24"
1-1/2" NIPPLE 3" LONG
T57
LB57
570 BLANK COVER
1-1/2" NIPPLE 4-1/2" LONG
1-1/2" PIPE
PIN ALL HORIZONTAL JOINTS
5.5'
2"
7.5'
2-1/2"
3"
8.5'
CLOSE NIPPLE WELDED IN POLE
LB CONDULET WITH COVER AND GASKET
UNY UNION
20"
CONDUIT
CONCRETE FOOTING RECOMMENDED

Fig. 4
Installation Details of Types MUA and MDB
Mounted on Tubular Steel Pole

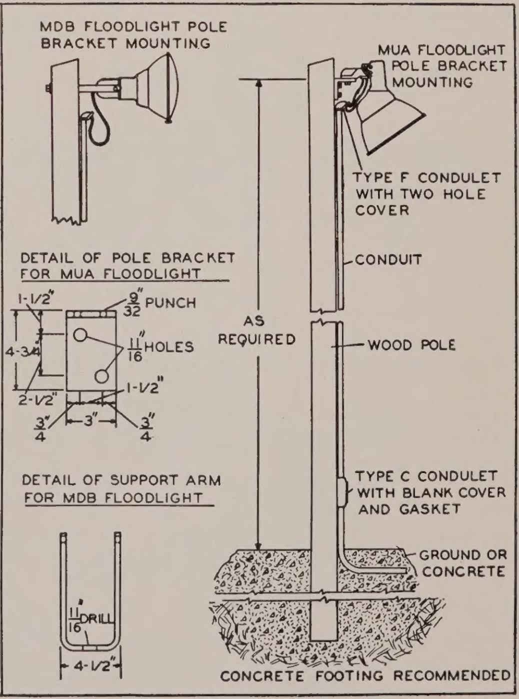
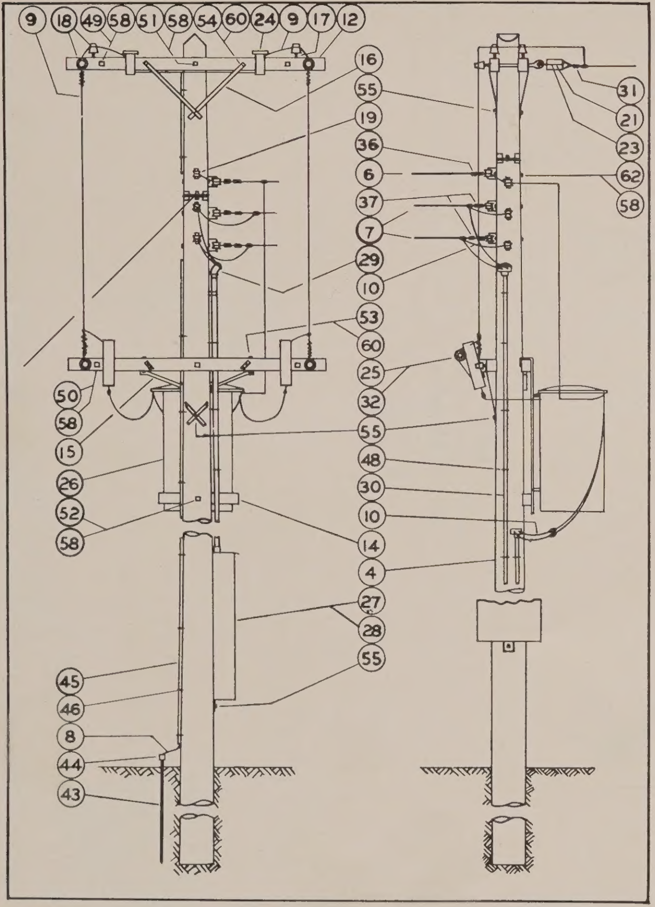

MDB FLOODLIGHT POLE BRACKET MOUNTING
MUA FLOODLIGHT POLE BRACKET MOUNTING
TYPE F CONDULET WITH TWO HOLE COVER
DETAIL OF POLE BRACKET FOR MUA FLOODLIGHT
1-1/2"
9/32" PUNCH
4-3/4
11/16" HOLES
1-1/2"
2-1/2"
3/4"
3"
3/4"
CONDUIT
AS REQUIRED
WOOD POLE
DETAIL OF SUPPORT ARM FOR MDB FLOODLIGHT
11/16" DRILL
4-1/2"
TYPE C CONDULET WITH BLANK COVER AND GASKET
GROUND OR CONCRETE
CONCRETE FOOTING RECOMMENDED

Fig. 5
Installation Details of Types MUA and MDB
Mounted on Wood Pole

Transformer Pole for Floodlight Installation



TRANSFORMER POLE

Fig. 1

Bill of Material

Complete with Ground but Less Secondary Wiring

Item No.	Material	No. of Pieces
4	40-foot, 7–8-inch creosoted pole, 8 lb. retention	1
9	No.____R. C. solid copper wire for primary line	40 ft.
12	8-foot, 6-pin, 3¼ x 4¼-inch cross arm for steel pins	4
14	Kicker arm, 24 x 3¼ x 4¼ inches	1
15	42-inch angle cross-arm brace, N.E.L.A. standard	1
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	6
17	Steel pin, ⅝-inch, long shank, 1-inch thread	8
18	Porcelain pin type insulator, 1-inch thread, 8000-volt	8
19	Insulated fork	6
21	Strain insulator, 2⅜-inch diameter over groove	2
23	Heavy duty insulator clevis, 2¼ x 4¼ inches. For Item 49	2
24	Outdoor distribution lightning arrester, 3000-volt	2
25	____ampere, 5000-volt expulsion type fuse cutout	2
26	Transformer,____kv-a., 2400-volt to 120/240 volt with 2–5% taps	1
27	____ampere, safety switch in weatherproof housing (steel or wood)	1
28	____ampere, one time fuse	2
29	Type F Condulet (Item 30 size)	2
30	____inch conduit	40 ft.
31	Single tube copper sleeve for No.____wire (Item 9 size)	2
32	Fuse link,____ampere rating. For Item 25	2
48	____inch pipe straps (Item 30 size)	12
49	⅝ x 18-inch double arming eye-bolt	2
50	⅝ x 16-inch double arming bolt	2
51	Machine bolt, ⅝ x 16 inches. For Item 12	2
52	Machine bolt, ⅝ x 12 inches. For Item 14	1
53	Machine bolt, ⅜ x 5½ inches. For Item 15	2
54	Carriage bolt, ⅜ x 4½ inches. For Item 16	6
55	Lag screw, ½ x 3½ inches. For Items 16, 15, and 26	6
58	Square washer, 2¼ x 2¼ inches. For Items 49, 50, 51, 52, and 62	28
60	Round washer, ⅜ inch. For Items 53 and 54	8
62	Machine bolt, ⅝ x 10 inches. For Item 19	6
	Standard Ground consisting of the following:	
8	No. 1 stranded wire	48 ft.
43	⅝ x 10-inch ground rod	1
44	Ground clamp, type GCH08 Groundulet	1
45	One-wire wood moulding	32 ft.
46	Staples for wood moulding	15
47	Staples for ground wire	1 lb.

Standard guy is shown on page 6 of this section. One or more may be required.

This bill of material is furnished for estimating purposes only. Local conditions may require changes.

Typical Corner Pole for Floodlight Installation

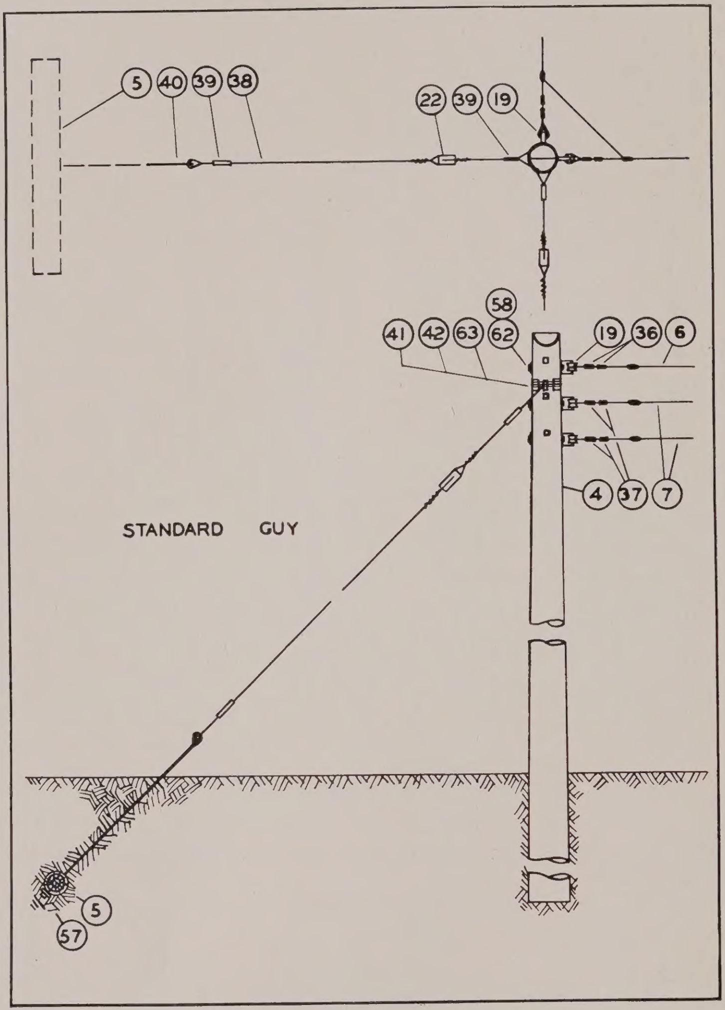


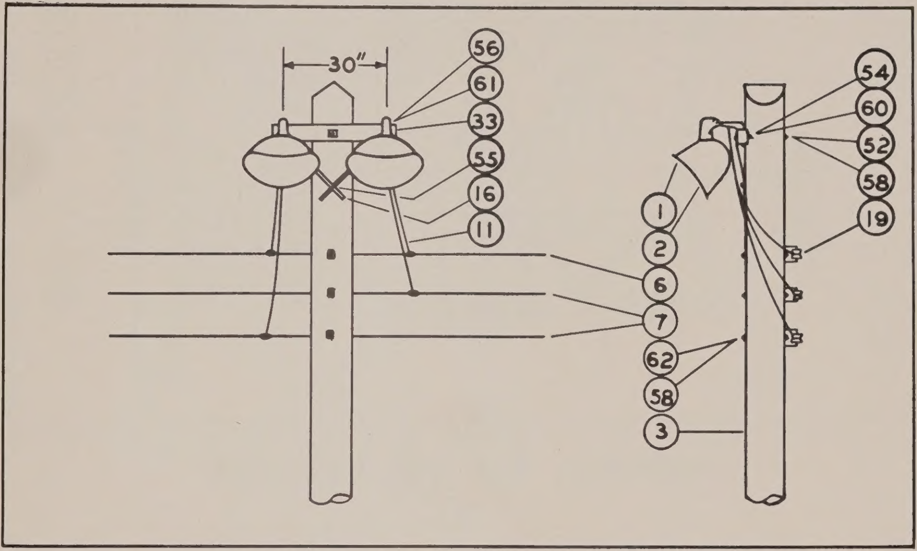
Fig. 2

Bill of Material

Item No.	Material	No. of Pieces
4	40-foot, 7–8-inch creosoted pole, 8 lb. retention	1
19	Insulated fork	6
58	Square washer, 2¼ x 2¼ inches. For Item 62	6
62	Machine bolt, ⅝ x 10 inches. For Item 19	6
	One or more standard guys, each consisting of the following:	
5	Creosoted pine log, 6 x 60 inches (or guy anchor)	1
22	Strain insulator	1
38	⅜-inch double galvanized steel guy wire	80 ft.
39	Guy wire clamp, 3-bolt	2
40	Thimble eye anchor rod, ⅝ x 96 inches	1
41	Strain plate	2
42	Guy wire hook	2
57	Square washer, 4 x 4 x ¼ inches	1
63	Machine bolt, ½ x 10 inches. For Item 42	1

This bill of material is furnished for estimating purposes only. Local conditions may require changes.

Floodlight Pole for Two Units



FLOODLIGHT POLE FOR TWO UNITS

Fig. 1

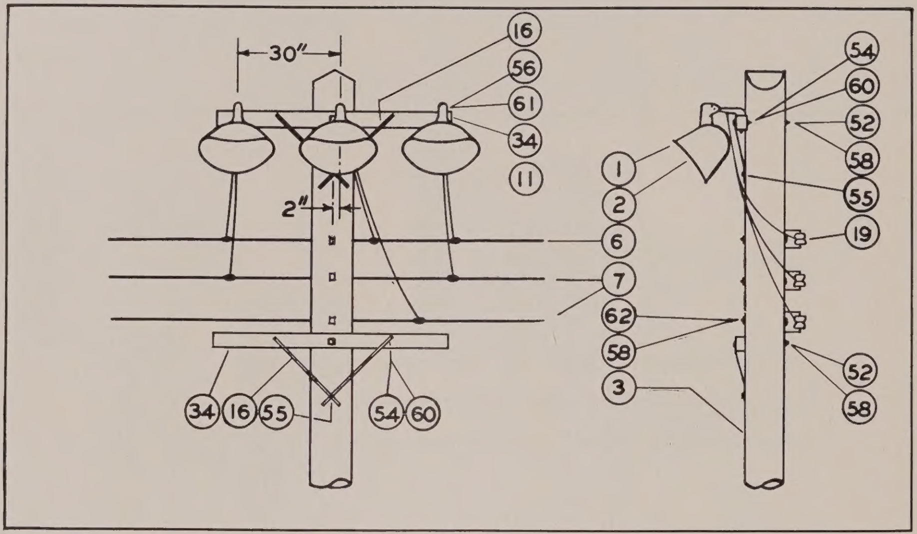
Bill of Material

Less Secondary Wiring

Item No.	Material	No. of Pieces
1	Floodlight—not covered by this bill of material. See section 202	2
2	Lamp as required	2
3	____foot creosoted pole, 8 lb. retention	1
11	No. 12 R. C. solid copper wire	30 ft.
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
19	Insulated fork	3
33	3-foot, 3¼ x 4¼-inch fir cross arm	1
52	Machine bolt, ⅝ x 12 inches. For Item 33	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 16 and 33	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
56	Machine bolt, ¾ x 6 inches. For Item 1	2
58	Square washer, 2¼ x 2¼ inches. For Items 52 and 62	5
60	Round washer, ⅜ inch. For Item 54	2
61	Round washer, ¾ inch. For Item 56	2
62	Machine bolt, ⅝ x 10 inches. For Item 19	3

For end and corner poles a standard guy is required, as shown on page 6 of this section.
This bill of material is furnished for estimating purposes only. Local conditions may require changes.

Floodlight Pole for Three Units



FLOODLIGHT POLE FOR THREE UNITS

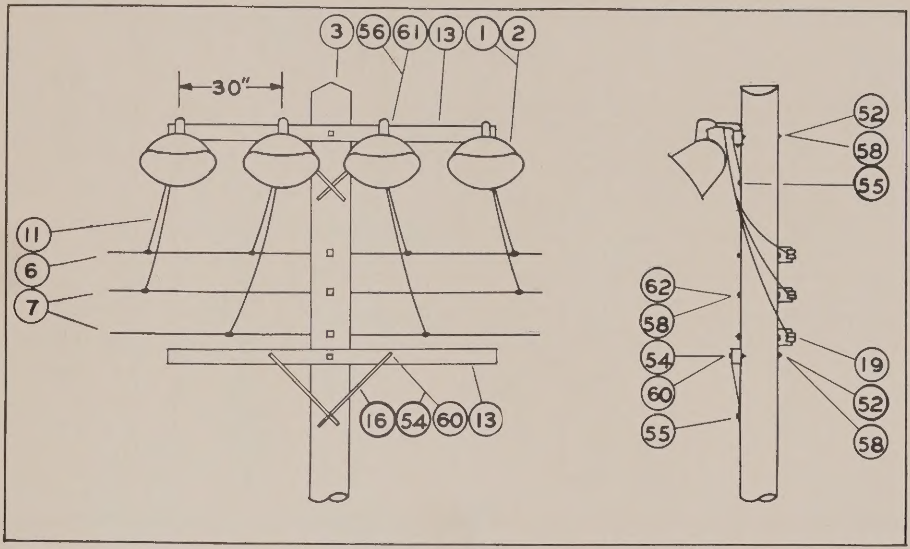
Fig. 2

Bill of Material
Less Secondary Wiring

Item No.	Material	No. of Pieces
1	Floodlight—not covered by this bill of material. See section 202	3
2	Lamp as required	3
3	____foot creosoted pole, 8 lb. retention	1
11	No. 12 R. C. solid copper wire	45 ft.
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
19	Insulated fork	3
34	6-foot, 3¼ x 4¼-inch fir cross arm	1
52	Machine bolt, ⅝ x 12 inches. For Item 34	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 16 and 34	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
56	Machine bolt, ¾ x 6 inches. For Item 1	3
58	Square washer, 2¼ x 2¼ inches. For Items 52 and 62	5
60	Round washer, ⅜ inch. For Item 54	2
61	Round washer, ¾ inch. For Item 56	3
62	Machine bolt, ⅝ x 10 inches. For Item 19	3
	An additional cross arm for use as a foot rest may be installed as shown, consisting of the following:	
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
34	6-foot, 3¼ x 4¼-inch fir cross arm	1
52	Machine bolt, ⅝ x 12 inches. For Item No. 34	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 16 and 34	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
58	Square washer, 2¼ x 2¼ inches. For Item 52	2
60	Round washer, ⅜ inch. For Item 54	2

For end and corner poles a standard guy is required, as shown on page 6 of this section.
This bill of material is furnished for estimating purposes only. Local conditions may require changes.

Floodlight Pole for Four Units



FLOODLIGHT POLE FOR FOUR UNITS

Fig. 1

Bill of Material

Less Secondary Wiring

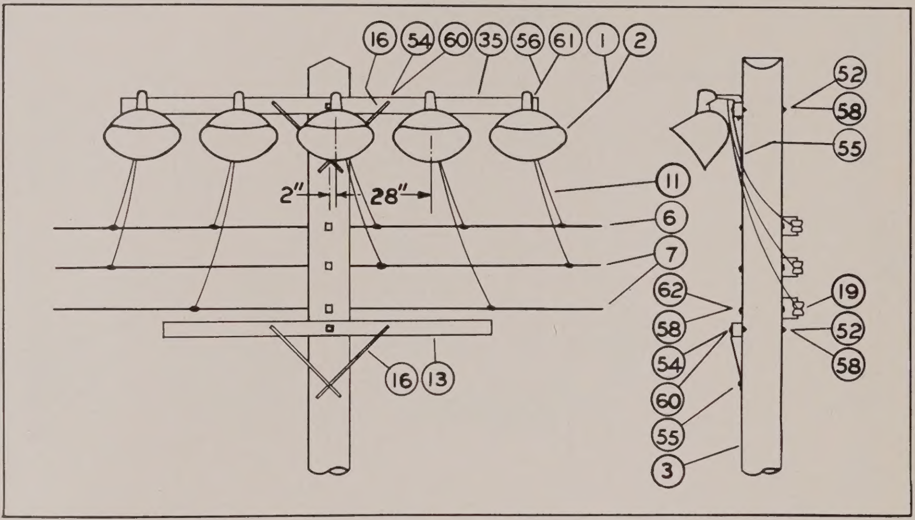
Item No.	Material	No. of Pieces
1	Floodlight—not covered by this bill of material. See section 202	4
2	Lamp as required	4
3	____foot creosoted pole, 8 lb. retention	1
11	No. 12 R. C. solid copper wire	60 ft.
13	8-foot, 3¼ x 4¼-inch fir cross arm	1
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
19	Insulated fork	3
52	Machine bolt, ⅝ x 12 inches. For Item 35	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 13 and 16	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
56	Machine bolt, ¾ x 6 inches. For Item 1	4
58	Square washer, 2¼ x 2¼ inches. For Items 52 and 62	5
60	Round washer, ⅜ inch. For Item 54	2
61	Round washer, ¾ inch. For Item 56	4
62	Machine bolt, ⅝ x 10 inches. For Item 19	3

An additional cross arm for use as a foot rest may be installed as shown, consisting of the following:

Item No.	Material	No. of Pieces
13	8-foot, 3¼ x 4¼-inch fir cross arm	1
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
52	Machine bolt, ⅝ x 12 inches. For Item 13	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 13 and 16	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
58	Square washer, 2¼ x 2¼ inches. For Item 52	2
60	Round washer, ⅜ inch. For Item 54	2

For end and corner poles a standard guy is required, as shown on page 6 of this section.
This bill of material is furnished for estimating purposes only. Local conditions may require changes.

Floodlight Pole for Five Units



FLOODLIGHT POLE FOR FIVE UNITS

Fig. 2

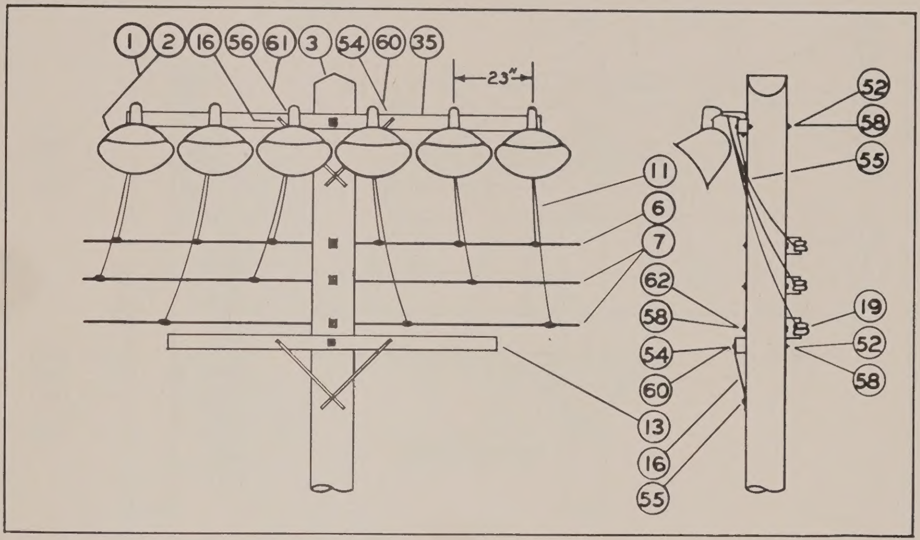
Bill of Material

Less Secondary Wiring

Item No.	Material	No. of Pieces
1	Floodlight—not covered by this bill of material. See section 202	5
2	Lamp as required	5
3	____foot creosoted pole, 8 lb. retention	1
11	No. 12 R. C. solid copper wire	75 ft.
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
19	Insulated fork	3
35	10-foot, 3½ x 4½-inch fir cross arm	1
52	Machine bolt, ⅝ x 12 inches. For Item 35	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 16 and 35	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
56	Machine bolt, ¾ x 6 inches. For Item 1	5
58	Square washer, 2¼ x 2¼ inches. For Items 52 and 62	5
60	Round washer, ⅜ inch. For Item 54	2
61	Round washer, ¾ inch. For Item 56	5
62	Machine bolt, ⅝ x 10 inches. For Item 19	3
	An additional cross arm for use as a foot rest may be installed as shown, consisting of the following:	
13	8-foot, 3¼ x 4¼-inch fir cross arm	1
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
52	Machine bolt, ⅝ x 12 inches. For Item 13	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 13 and 16	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
58	Square washer, 2¼ x 2¼ inches. For Item 52	2
60	Round washer, ⅜ inch. For Item 54	2

For end and corner poles a standard guy is required, as shown on page 6 of this section.
This bill of material is furnished for estimating purposes only. Local conditions may require changes.

Floodlight Pole for Six Units



FLOODLIGHT POLE FOR SIX UNITS

Fig. 1

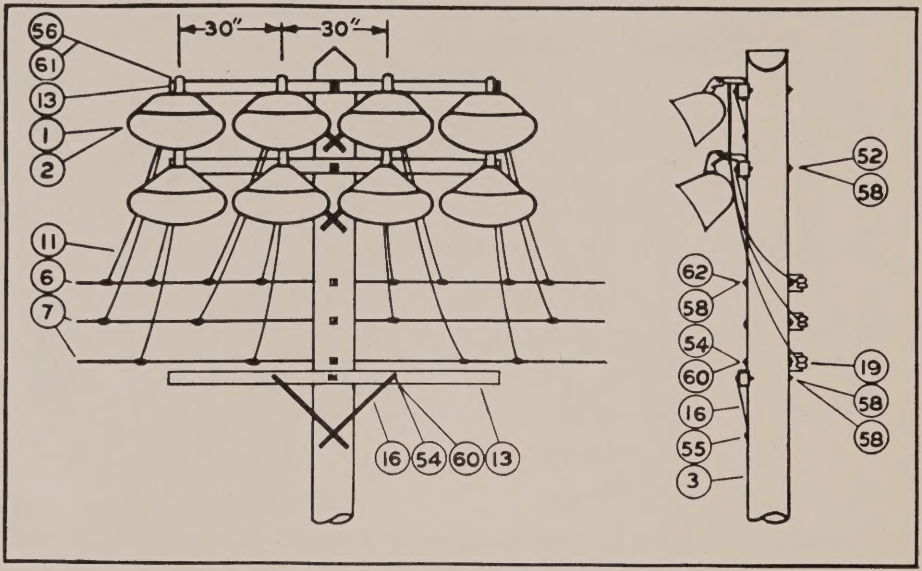
Bill of Material

Less Secondary Wiring

Item No.	Material	No. of Pieces
1	Floodlight—not covered by this bill of material. See section 202	6
2	Lamp as required	6
3	____foot creosoted pole, 8 lb. retention	1
11	No. 12 R. C. solid copper wire	90 ft.
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
19	Insulated fork	3
35	10-foot, 3½ x 4½-inch fir cross arm	1
52	Machine bolt, ⅝ x 12 inches. For Item 35	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 16 and 35	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
56	Machine bolt, ¾ x 6 inches. For Item 1	6
58	Square washer, 2¼ x 2¼ inches. For Items 52 and 62	5
60	Round washer, ⅜ inch. For Item 54	2
61	Round washer, ¾ inch. For Item 56	6
62	Machine bolt, ⅝ x 10 inches. For Item 19	3
	An additional cross arm for use as a foot rest may be installed as shown, consisting of the following:	
13	8-foot, 3¼ x 4¼-inch fir cross arm	1
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
52	Machine bolt, ⅝ x 12 inches. For Item 13	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 13 and 16	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
58	Square washer, 2¼ x 2¼ inches. For Item 52	2
60	Round washer, ⅜ inch. For Item 54	2

For end and corner poles a standard guy is required, as shown on page 6 of this section.
This bill of material is furnished for estimating purposes only. Local conditions may require changes.

Floodlight Pole for Eight Units



FLOODLIGHT POLE FOR EIGHT UNITS

Fig. 2

Bill of Material

Less Secondary Wiring

Item No.	Material	No. of Pieces
1	Floodlight—not covered by this bill of material. See section 202	8
2	Lamp as required	8
3	____foot creosoted pole, 8 lb. retention	1
11	No. 12 R. C. solid copper wire	120 ft.
13	8-foot, 3¼ x 4¼-inch fir cross arm	2
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	4
19	Insulated fork	3
52	Machine bolt, ⅝ x 12 inches. For Item 13	2
54	Carriage bolt, ⅜ x 4½ inches. For Items 13 and 16	4
55	Lag screw, ½ x 3½ inches. For Item 16	2
56	Machine bolt, ¾ x 6 inches. For Item 1	8
58	Square washer, 2¼ x 2¼ inches. For Items 52 and 62	7
60	Round washer, ⅜ inch. For Item 54	4
61	Round washer, ¾ inch. For Item 56	8
62	Machine bolt, ⅝ x 10 inches. For Item 19	3

An additional cross arm for use as a foot rest may be installed as shown, consisting of the following:

13	8-foot, 3¼ x 4¼-inch fir cross arm	1
16	Steel cross-arm brace, 28 x 1¼ x ¼ inches	2
52	Machine bolt, ⅝ x 12 inches. For Item 13	1
54	Carriage bolt, ⅜ x 4½ inches. For Items 13 and 16	2
55	Lag screw, ½ x 3½ inches. For Item 16	1
58	Square washer, 2¼ x 2¼ inches. For Item 52	2
60	Round washer, ⅜ inch. For Item 54	2

For end and corner poles a standard guy is required, as shown on page 6 of this section.
This bill of material is furnished for estimating purposes only. Local conditions may require changes.

Calculations—Closed Floodlights

Introduction: The information given below is offered as a guide to the selection of the proper floodlight for any given installation. There are so many variables involved in many floodlight problems that no simple rules will work in all cases. Any problem involving a large number of closed floodlights or unusual conditions should be referred to Crouse-Hinds Illumination Department for recommendations.

Standard Layouts: The lighting of certain types of areas, such as outdoor sports and gasoline service stations has been standardized and there are standard layouts which cover most installations. Those available are enumerated below, and will be mailed on request.

Application:

- Archery
  - (Per Target)
- Badminton or Shuttlecock
- Baseball
- Basketball
- Bowling
- Boxing
- Croquet or Roque
- Curling
  - (Six Rinks)
- Dog Racing
- Football—
  - Open Floodlights
  - Closed Floodlights
- Gasoline Service Stations
- Golf Driving
- Handball
- Hockey
- Horseshoes
  - (Five Courts)
- Lawn Bowls
  - (Six Rinks)
- Polo Practice Field
- Shooting—
  - Target
  - Trap
  - Skeet
- Soccer
- Softball
- Swimming Pools—
  - Underwater
  - Overhead
- Tennis—
  - Overhead
  - Floodlighting
- Toboggan Slide
- Volleyball
- Wrestling

Closed versus Open Floodlights: The question of whether to use open or closed floodlights depends largely on the permanency of the installation, the cleanliness of the surroundings, and the distance the light must be projected. Open floodlights are designed to be used at short range. They naturally require more maintenance. Closed floodlights reduce maintenance to a minimum and can project light over much greater distances effectively and efficiently. The calculation data given on the following pages are for closed floodlights. Calculation data for open floodlights are given with their listings.

Selection of Intensity: When planning a floodlight installation, the first thing to determine is the intensity to which the area must be lighted. Light intensity is expressed in foot candles. A foot candle is the intensity obtained when one lumen of light falls on one square foot. The intensity required for lighting buildings, signs, or monuments depends on two things—(1) the color of the area to be lighted, and (2) the brightness of the surroundings. The object, to be attractive, must be bright enough to show a sharp contrast with its surroundings. Brightness depends on reflected light. A dark object is a poor reflector and must be lighted to many times the intensity necessary for a light colored object to show as effective a contrast. A sign whose letters and background are in contrasting colors can be lighted with a fraction of the light required if the letters and background are not in sharp contrast. If a sign or building is located in a downtown section of a city where the street lights are bright and there are many lighted signs and show windows, it must be lighted to a much higher intensity than if it were located in a park or residential section where the surroundings are dark. In the brightly lighted districts, the eyes of observers are accustomed to a high level of illumination and a sign must be brilliantly lighted, if it is to attract attention.

The table below gives the intensities which have been found through practice to be required for various types of installations. Varying conditions may require higher or lower intensities than those shown.

Foot Candle Intensities Under Average Conditions

Subject to be Illuminated	If Surroundings are Poorly Illuminated	If Surroundings are Well Illuminated
	Foot Candles Intensity	Foot Candles Intensity
Buildings and Monuments:		
White or Cream	2 to 5	5 to 15
Light Yellow or Buff	3 to 6	6 to 15
Medium Buff	6 to 12	10 to 20
Dark Surface	8 to 30	20 to 40
Billboards and Signs	3 to 15	10 to 40
Gasoline Service Stations:		
Building	4 to 8	10 to 15
Yard and Drive	1 to 2	2 to 4

Subject to be Illuminated	Foot Candles Intensity	Subject to be Illuminated	Foot Candles Intensity
Automobile Parking Spaces	0.5 to 1	Lumber Yards	0.5 to 1
Bathing Beaches	0.5 to 1	Playgrounds	2 to 5
Buildings:		Polo Fields	3 to 5
Construction	4 to 6	Prison Yards	1 to 3
Excavation	1 to 2	Quarries	1 to 3
Flags	5 to 15	Railroad Yards	0.1 to 1
Golf Courses, Miniature	3 to 10	Skating Ponds	0.5 to 2
Handball Courts	10 to 20	Swimming Pools	5 to 10
Ice Hockey Rinks	3 to 8	Tennis Courts	5 to 25
Loading Docks	2 to 5	Yards of Mills and Factories	0.25 to 1

Calculations—Closed Floodlights

Color Floodlighting: Color floodlighting is accomplished with standard floodlights and colored heat-resisting lenses or color screens placed on the inside of the floodlights. Color screens absorb a large percentage of the light and necessitate the use of much higher wattages than are employed in white lighting. Under average conditions the number of lumens employed for color should be increased over what would be used for a first-class installation of white lighting by the following multipliers: amber, 1.5; red, 2 to 3; green, 3; blue, 4 to 5.

If the same type and size floodlight is used for both white and color lighting, the wattages required for white light can be multiplied by these factors. Often, however, it will be found that when using color, it is more economical to use larger floodlights and lamps than when using white light. The larger floodlights and lamps being more efficient, the wattage does not have to be increased as much as the multipliers would indicate. For this reason, the beam lumens required for white light should be multiplied by the above factors, and the color installation calculated for the largest size floodlights that will produce even distribution of light.

The colors used in lighting buildings or other subjects should be chosen only after a careful study of the color of the object itself. A white building can be floodlighted in any color. A red brick building should only be lighted with white or red light and if red light is used, the intensity should be very high. A buff brick building can be floodlighted in white, red, or amber. The colors usually used in floodlighting are red, amber, green, and blue. Several types of color cycles have been developed and buildings can be floodlighted in continuously changing color effects. The effects that can be obtained depend to a great extent on the construction of the building. Crouse-Hinds Illumination Department will plan any color effect desired, on receipt of complete plans.

Calculating the Installation:

METHOD NO. 1—BEAM LUMEN FORMULA

This method of calculation is recommended as the most accurate. The various steps are described as follows:

Step No. 1: Plot plan and elevation views of the area to be lighted. Plot the proposed floodlight location and measure with a protractor the number of degrees spread required both horizontally and vertically.

Step No. 2: Select the combination of reflector and lens from table of distribution data on page 3 that appears to be suitable. Divide the spread required both horizontally and vertically, as determined under Step No. 1, by the spread of the floodlight selected.

Step No. 3: Provide for uniform coverage and overlapping of beams by multiplying the number of floodlights required for coverage (obtained under Step No. 2) by 2. The uniformity obtained by sufficient overlapping is of extreme importance.

Step No. 4: Determine the beam lumens required.

TOTAL BEAM LUMENS = AREA TO BE LIGHTED x INTENSITY IN FOOT CANDLES.

If color is to be used, multiply by the factors given under "Color Floodlighting" above.

Step No. 5: Determine the size floodlight required, by dividing the total beam lumens obtained from Step No. 4, by the number of floodlights required for uniform coverage obtained from Step No. 3. This gives the required beam lumens per floodlight. Then refer to the table on page 3, and select the size floodlight which will give the desired beam spread and beam lumens. It is sometimes necessary to check several combinations in order to arrive at the most efficient installation. If an appreciable proportion of the beam is wasted by spilling over the area to be lighted, allowance should be made for this.

Step No. 6: A final check of coverage and intensity obtained with the floodlight selected should be made.

METHOD NO. 2—CHARTS

The chart method of calculation provides a quick and convenient method for estimating purposes. It is not as accurate as Method No. 1.

Step No. 1: Determine the total beam spread required. Refer to Chart No. 1, page 6. Lay a straight edge connecting the distance from the floodlights to the area to be lighted on line C with beam spread in feet (or width of area) on line B. Read on line A the number of degrees required. Then repeat this using the height or length of the area to determine the vertical spread required. Select the beam spread from the table on page 3, which appears to bear a reasonable ratio to the total spread required, and divide it into the required horizontal and vertical angles. This gives the number of floodlights required to just cover the area with no allowance for overlapping. Chart No. 1 cannot be used if the beam strikes the area at a sharp angle. It is approximately correct if the beam strikes the surface within 20° of perpendicular. At greater angles the beam is distorted in one direction, and Method No. 1 should be used. This chart can also be used to calculate the size light spot produced by any given beam spread.

Step No. 2: Provide for uniform coverage by multiplying the number of floodlights required to just cover the area, as determined in Step No. 1, by 2. This is of great importance if uniform lighting is desired.

Step No. 3: Calculate the area to be lighted, in square feet. Refer to Chart No. 2, page 7. Place a straight edge across lines A and D, connecting the area on A with the required intensity on line D. Mark the corresponding reference point on line B.

Step No. 4: Lay the straight edge across lines B, C, and E, connecting the reference point just obtained on B with the number of floodlights required for coverage on E. Read on line C the beam lumens per floodlight required. Then refer to the table on page 3, and select the size floodlight which will give the desired beam spread and beam lumens. It is sometimes necessary to check several combinations in order to arrive at the most efficient installation. This calculation assumes that all the light from the floodlights will fall on the area. If the distance from the floodlights to the area is such that an appreciable proportion of the beam is wasted, this should be estimated and allowed for.

Step No. 5: A final check for intensity should be made from Chart No. 2, page 7, using on line C the actual value of beam lumens given by the floodlight selected. This is especially important if it is found necessary to use G-bulb lamps, on account of their lower efficiency.

Calculations—Closed Floodlights

FLOODLIGHT ILLUMINATION DATA

Floodlight			Lamp			Beam			Beam Spread		Curve No.
Type	Reflector	Lens	Watts	Bulb	Lumens	Lumens	Eff.	C.P.#	Horizontal	Vertical	
ADA-12	Wide Beam	Plain Spread Diffusing	200	PS-30	3400	1150 1152 1488	34% 34% 44%	10414 7309 3102	34° 47° 91°	33° 34° 88°	1502 1501 1514
	Narrow Beam	Plain Spread Diffusing	200	PS-30	3400	1261 1273 1624	37% 37.4% 48%	14710 10080 3752	29° 45° 86°	26° 27° 85°	1512 1509
	Narrow Beam	Plain Spread	250	G-30	3700	1303 1384	35% 37.5%	97790 30300	12° 31°	11° 12°	1503 1508
ADE-14, ADR-14	Wide Beam	Plain Spread Diffusing	500	PS-40	9800	4107 4834 5064	42% 49% 51.5%	33040 27590 10890	37.5° 51° 72°	36° 36.5° 71°	. . . .
	Narrow Beam	Plain Spread Diffusing	500	PS-40	9800	4796 4950 5680	48.5% 50% 57.5%	56900 38890 14270	30.5° 46° 69.5°	28.5° 26° 66.5°	1515 . . . .
	Narrow Beam	Plain Spread	500	G-40	8650	3542 3950	41% 45.5%	221000 66283	13° 35°	13.5° 16.5°	. . . .
ADE-16	Wide Beam	Plain Spread Diffusing	1000	PS-52	20700	10780 9600 10020	52% 46.5% 48.5%	69550 33050 19120	41.5° 65° 81°	38° 52° 79°	2000 2001 2002
	Narrow Beam	Plain Spread	1000	G-40	19300	6120 7720	32% 40%	434200 154600	12.8° 34.5°	11.2° 14.5°	2003 . . . .
LCE-1120	Wide Beam	Plain Spread Diffusing	1500	PS-52	33000	18710 19640 20490	56.5% 59.5% 62%	139300 104300 34890	42° 61° 80°	34° 34.5° 78.5°	2004 2005 2006
	Narrow Beam	Plain Spread	1500	PS-52	33000	14700 17040	44.5% 51.5%	484400 227600	18.9° 38°	16.5° 17.2°	2007 2008
	Narrow Beam	Plain Spread	1500	G-48	28400	11540 13440	40.5% 47.5%	688400 240500	14.4° 35.5°	12.5° 14°	2009 2010
LCE-1020	Narrow Beam	Plain Spread Diffusing	1500	PS-52	33000	14380 15070 17160	43.6% 45.6% 52%	384240 164400 42780	21° 41° 64°	19° 21° 63°	1518 1517 1519
	Narrow Beam	Plain Spread	1500	G-48	28400	12220 13280	43% 46.5%	716230 221300	14° 35.5°	12.5° 14°	1521 . . . .
LCE-24	Narrow Beam	Plain 45° Spread 80° Spread	1500	G-48	28400	11670 12070 12280	41% 42.5% 43%	910800# 255800# 133000#	11° 42° 80°	10.5° 11° 11°	. . . .
	Wide Beam	Plain	2000	PS-52	41000	18040	44%	363500#	20°	18°	. . . .
	Narrow Beam	Plain 45° Spread 80° Spread 50° Diffusing 90° Diffusing	2000	PS-52	41000	18450 17640 18860 18310 20500	45% 43% 46% 44.5% 50%	415500# 211800# 128000# 70160# 62860#	18° 45° 80° 50° 90°	16° 19° 18° 50° 85°	. . . .
DCE-16	Narrow Beam	Plain	1000 1000	G-40 T-20	19300 20500	4020 4220	. . . .	605000 1100000	7.5° 7.5°	6.5° 5.6°	. . . .

#Candlepower values are average of ten maximum points except those marked (#) which are maximum readings.

Calculations—Closed Floodlights

SAMPLE CALCULATION

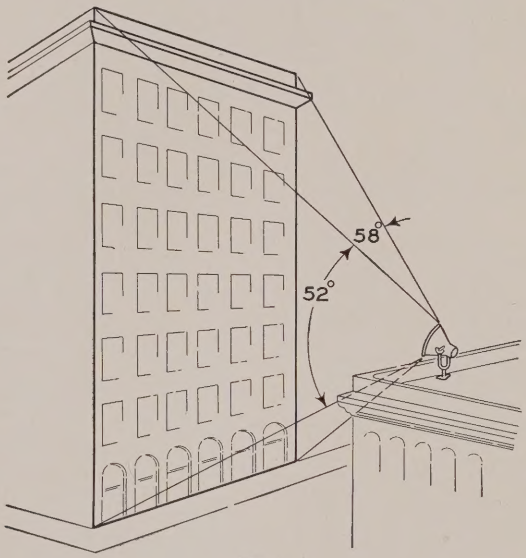


Fig. 1

PROBLEM (Illustrated above in Fig. 1):

A white stone building located in a brightly lighted district is to be floodlighted from the roof of a building across the street, which is 80 feet wide. The building is 75 feet high and 85 feet wide.

Selection of Intensity (See Table on page 1 of this section):

15 foot candles is selected for a first-class job.

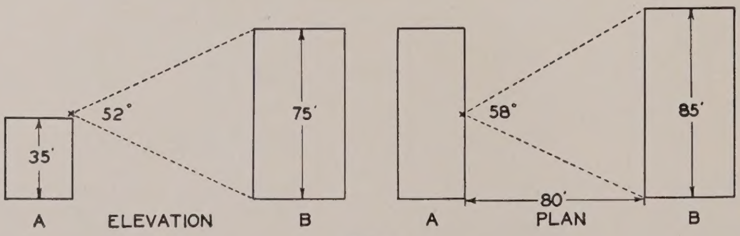


Fig. 2

Calculations—Closed Floodlights

SOLUTION (By Method No. 1):

Step No. 1: After drawing the plan and elevation views as above, the total horizontal spread required is measured and found to be 58°, and the vertical spread 52°.

Step No. 2: Referring to table on page 3, the beam spread of type ADE-16 floodlight with wide beam reflector and plain lens is 41.5° horizontal by 38° vertical. Dividing these values into the spreads required shows that 1.4 floodlights are required horizontally and 1.37 vertically.

Step No. 3: Multiplying these values by 2 for uniform coverage, it is seen that 3 floodlights will be required in each horizontal row and 3 vertical rows, making a total of 9 floodlights.

Step No. 4: Area = 75 x 85 feet = 6375 square feet.
Total beam lumens required = 6375 x 15 = 95625.
(area) (F.C.)

Step No. 5: Dividing the total beam lumens required from Step No. 4, by 9, shows that each floodlight must provide 10625 lumens. From Table on page 3, type ADE-16 with wide beam reflector and plain lens produces 10780 lumens. It is, therefore, decided to use 9 of these floodlights.

Step No. 6: The beam spread of the unit selected is the same as that assumed under Step No. 2, therefore, no further check for coverage is necessary. A check for intensity shows that these floodlights would produce 15.2 foot candles if all of the light falls on the building. If difficulty is experienced in finding a suitable combination, the problem may be referred to Crouse-Hinds Illumination Department for advice.

SOLUTION (By Method No. 2):

Step No. 1: To determine the total beam spread required, refer to Chart No. 1, page 6. Lay a straight edge connecting 80 feet on line C with 85 feet on line B. The required total horizontal spread on line A is 58°. See Fig. 3. Connecting 80 feet on line C with 75 feet on B, shows the required total vertical spread to be 52°. The table on page 3 shows the beam spreads obtainable. As a trial, type ADE-16 with wide beam reflector and plain lens is selected. The spread is 41.5° horizontally by 38° vertically. Dividing these into the spreads required shows that it requires approximately 1½ floodlights each way to cover the area once.

Step No. 2: To provide for uniform coverage, multiply 1½ x 2, showing that 3 floodlights are required to cover the building horizontally, and 3 rows are required for vertical coverage, making a total of 9 floodlights.

Step No. 3: Area = 75 x 85 feet = 6375 square feet. Refer to Chart No. 2, page 7. Place a straight edge across lines A and D, as shown in Fig. 4, connecting 6375 on line A with 15 foot candles on D. Mark the reference point on line B.

Step No. 4: Lay the straight edge across lines B, C, and E, as shown in Fig. 5, connecting the reference point obtained on B with 9 units, the number of floodlights required for coverage on E. Read on line C the beam lumens per floodlight required which is approximately 10500 lumens. Then refer to the table on page 3 and select the floodlight which will fulfill the spread and lumen requirements. Type ADE-16 with wide beam reflector, plain lens, and 1000-watt, PS52-bulb lamp—meets all conditions and therefore is the unit to be used.

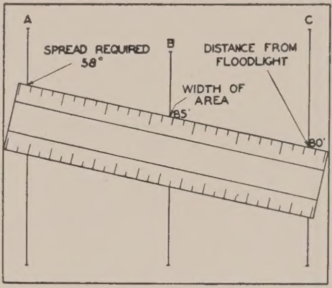


Fig. 3

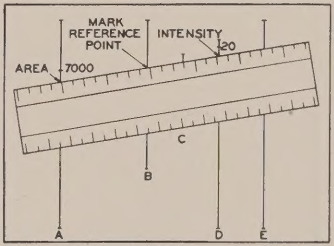


Fig. 4

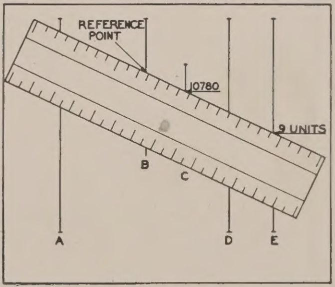


Fig. 5

Calculations—Closed Floodlights

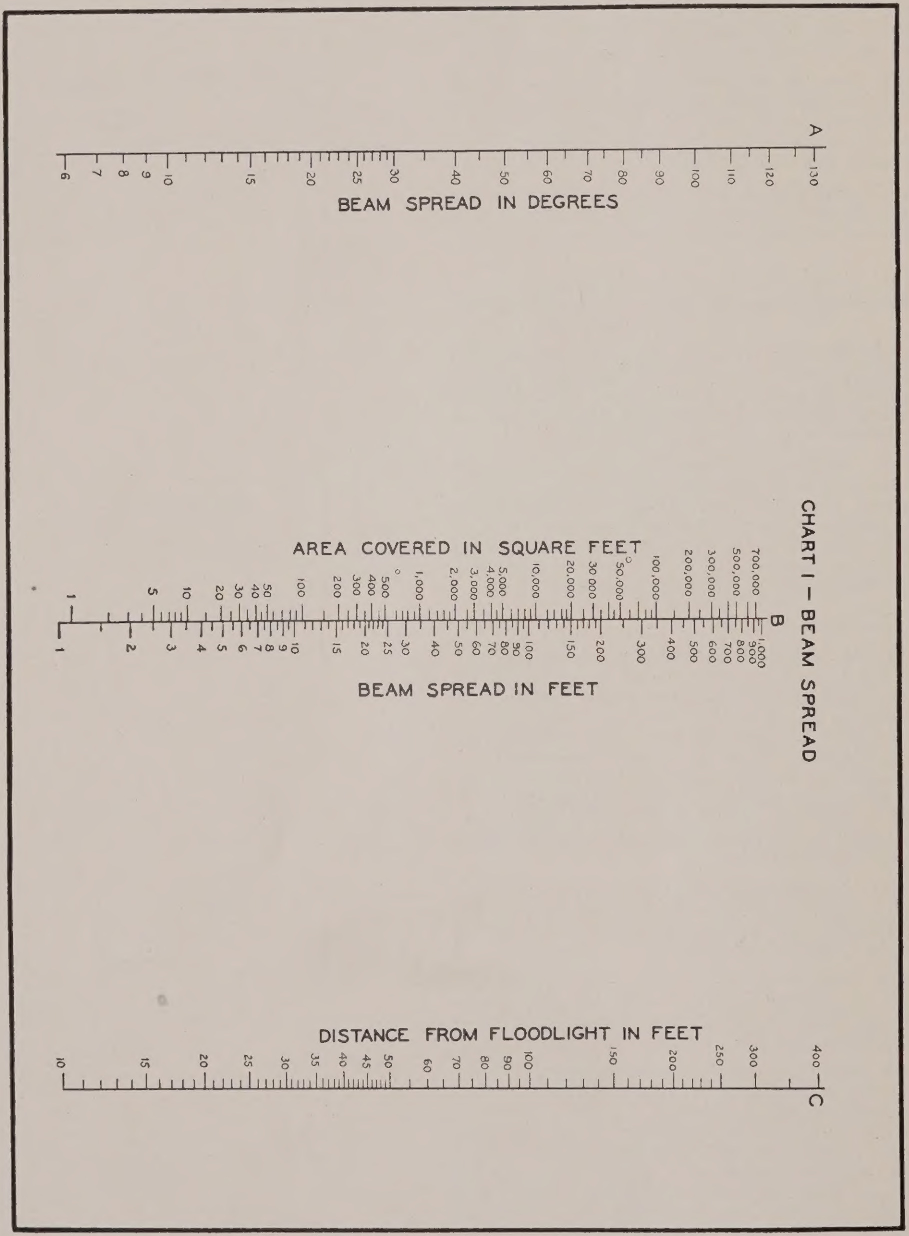


Fig. 6

Calculations—Closed Floodlights

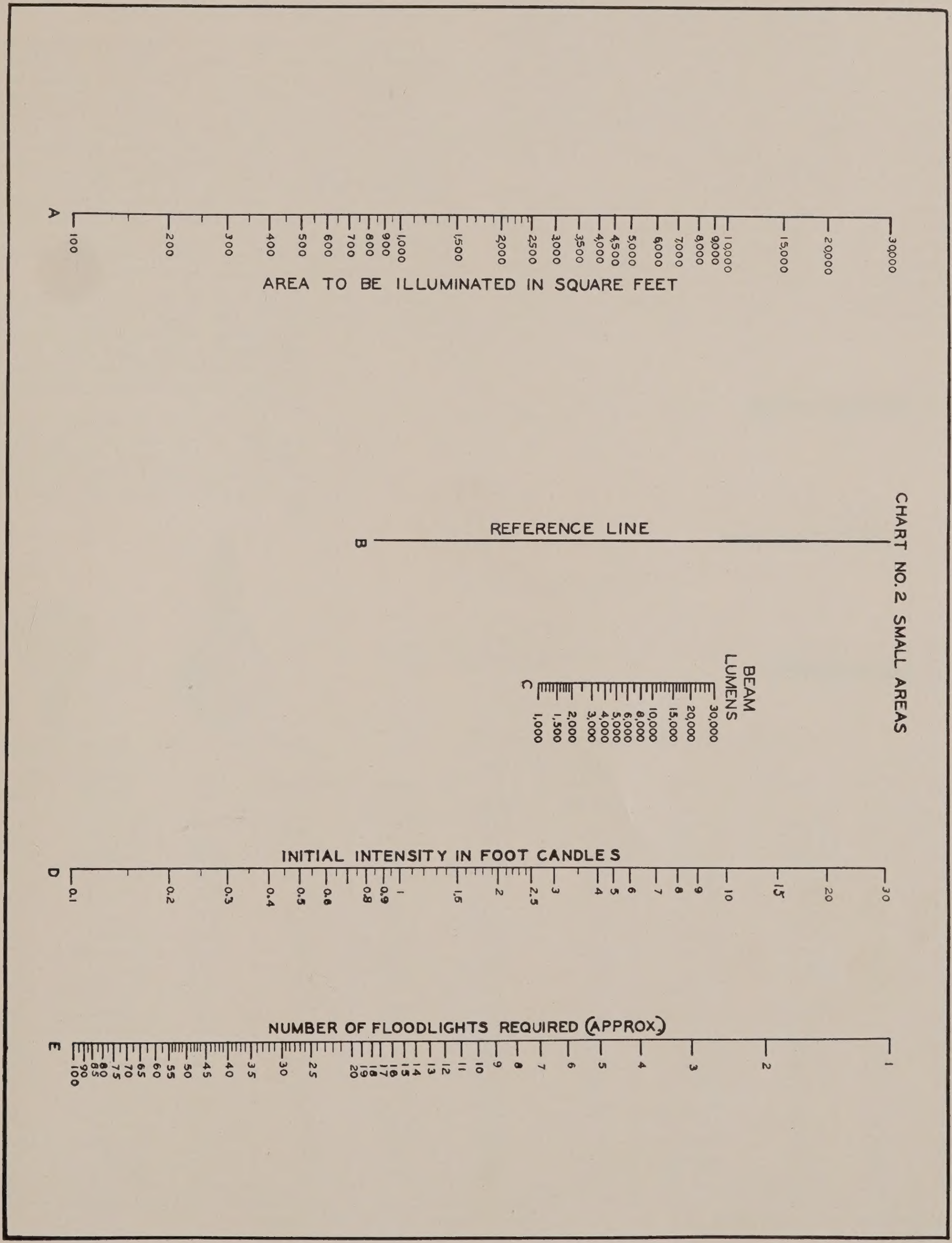


Fig. 7

Incandescent Lamps

Selection of Lamps: Incandescent lamps are made in several styles of bulbs and with different types of filaments. The life of incandescent lamps varies from 50 to 1000 hours, depending upon the service for which they are designed.

The large lamps generally used for interior lighting are known as "General Lighting Service" lamps and are made in PS bulbs. These lamps are suitable for the majority of floodlight installations, and are recommended with most floodlights listed in this catalog where it is not necessary to project the light for great distances or to confine it to small areas. They should be used for all short range or medium range lighting on account of their lower cost, longer life, and higher efficiency.

Some floodlighting installations require that the light be concentrated into a narrow beam and projected to a distance. For this class of floodlighting, a line of lamps known as "Floodlight" lamps are available. These lamps are made in G bulbs, have concentrated filaments, and an average rated life of 800 hours compared to 1000 hours for the PS-bulb lamps. They produce less light per watt than the "General Lighting Service" lamps but, for certain installations, this sacrifice in efficiency is justified by the greater beam concentration that can be obtained with them. When using these lamps, the precautions noted under "Burning Position" should be observed.

Voltage: The voltage at which an incandescent lamp operates is of extreme importance. The circuit voltage at the lamp should correspond with the rated voltage of the lamp, except for certain types of sports lighting, where overvoltage operation may be justified. Undervoltage operation is never economical. The chart, Fig. 8, illustrates these factors. Trouble with lamps burning out frequently can usually be traced to high voltage. Lamps can be obtained rated at 105, 110, 115, 120, 125, or 130 volts. The safest way is to check the voltage at the floodlight terminals with a voltmeter at night, while the floodlight is in operation, and then if the voltage does not equal the rated lamp voltage which is etched on the bulb, lamps of the nearest voltage rating should be obtained.

Lamp Life: The hours of life given in the table below, and shown graphically in Fig. 8, are rated average hours. Some lamps will burn longer, and others will burn less than their rated life, but under the usual operating conditions the average number will come close to their rated life.

By the law of averages, several short-life lamps may be found in one installation, but these short-life lamps will be compensated for by other lamps which last much longer than their rated life.

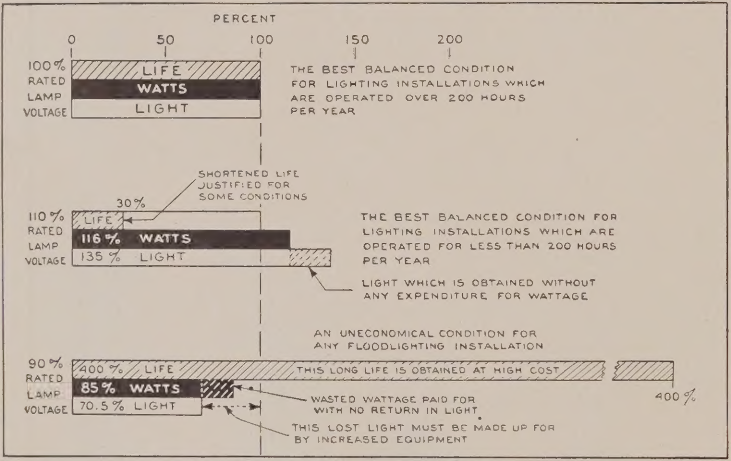


Fig. 8—Effect of Voltage on Lamp Performance

Fig. 9—PS-Bulb Lamp

Fig. 10—G-Bulb Lamp

Watts	Volts	Bulb§	Base	Light Center Length	Life in Hours	Lumens	Filament	List, each*	Lighting Service	Burning Position
2000	115	PS-52	Mogul	9½″	1000	45000	C7A	$13.00	General	Any
1500	115	PS-52	Mogul	9½″	1000	33000	C7A	5.75	General	Any
1500	115	G-48	Mogul	5¼″	800	27750	C5	10.00	Floodlight	†B.D.
1000	115	PS-52	Mogul	9½″	1000	20700	C7A	4.00	General	Any
1000	115	G-40	Mogul	5¼″	800	18700	C5	6.75	Floodlight	†B.D.
750	115	PS-52	Mogul	9½″	1000	14550	C7A	3.75	General	Any
500	115	PS-40	Mogul	7″	1000	9800	C7A	1.40	General	Any
500	115	G-40	Mogul	4¼″	800	8350	C5	3.25	Floodlight	‡B.D.
300	115	PS-35	Mogul	7″	1000	5520	C7A	.75	General	Any
250	115	G-30	Medium	3″	800	3700	C5	1.75	Floodlight	‡B.D.
200	115	PS-30	Medium	6″	1000	3400	C9	.45	General	Any
200	115	PS-30	Md. Pf.	5³⁄₁₆″	1000	3400	C9	1.05	General	Any
150	115	PS-25	Medium	5¼″	1000	2415	C9	.40	General	Any
150	115	P-25	Medium	3″	500	1710	C5	1.60	Headlight	‡B.D.
100	115	PS-25	Medium	5¼″	1000	1370	C9	.50	General	Any
100	115	A-23	Medium	4⅜″	750	1530	C9	.20	General	Any
100	115	A-23 (C)	Md. Pf.	3⁹⁄₁₆″	750	1530	C9	.50	General	Any
100	115	P-25	Medium	3″	200	1360	C5	1.00	Spotlight	‡B.D.
94	115	P-25	Medium	2¹⁄₁₆″	1000	933	C5	1.10	S.R.H.	Any
60	115	A-21 (C)	Md. Pf.	2⁹⁄₁₆″	750	750	C9	.45	General	Any

*The list prices given are the prices shown in the latest available Mazda Lamp schedules and are subject to the lamp manufacturers' terms and discounts. The Crouse-Hinds Company does not sell lamps.

†Can be burned in any position from base down to horizontal.

‡Can be burned in any position except within 45° of the vertical base up.

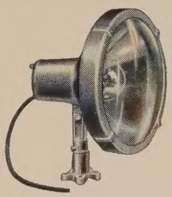
§All lamps in the above table have clear bulbs.

CROUSE-HINDS

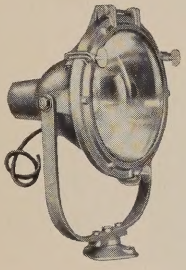
Pictorial Index—Floodlights

Closed Floodlights

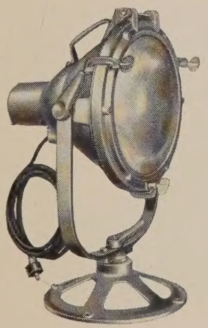
Section 201, Pages 1 to 26



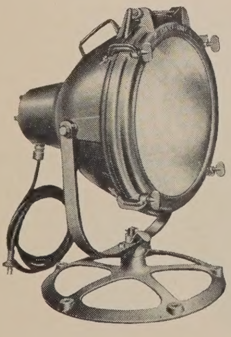
Type ADA-12
200-Watt
Section 201
Pages
1 and 2



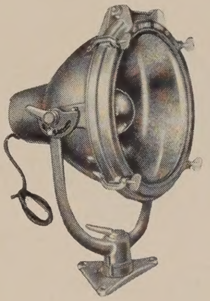
Type ADE-12
200-Watt
Section 201
Pages
3 and 4



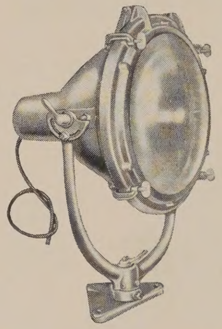
Type ADR-12
200-Watt
Section 201
Pages
5 and 6



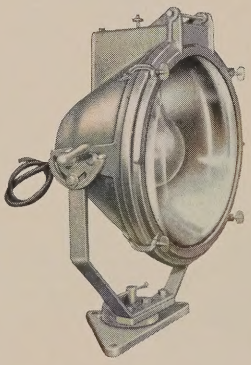
Type ADR-14
500-Watt
Section 201
Pages
5 and 6



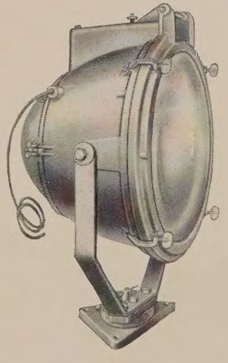
Type ADE-14
500-Watt
Section 201
Pages
7 and 8



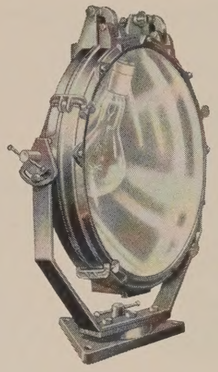
Type ADE-16
1000-Watt
Section 201
Pages
9 and 10



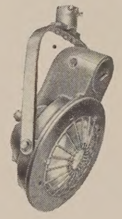
Type LCE-1120
1500-Watt
Section 201
Pages
11 and 12



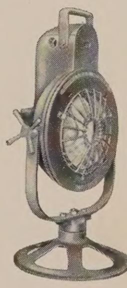
Type LCE-1020
1500-Watt
Section 201
Pages
13 and 14



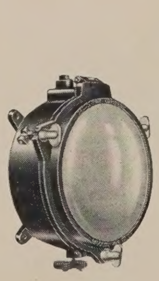
Type LCE-24
2000-Watt
Section 201
Pages
15 and 16



Type RCDE-8
Suspension
Section 201
Pages
19 and 20



Type RCDE-8
Trunnion
Section 201
Pages
19 and 20

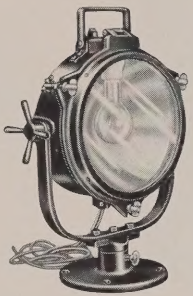


Type RM
Section 201
Pages
21 and 22

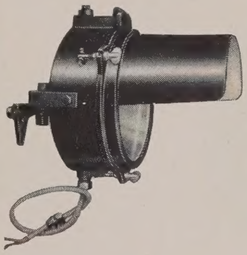
Continued on page 2

Pictorial Index—Floodlights

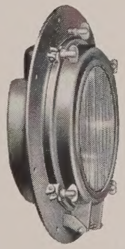
Closed Floodlights—Cont'd



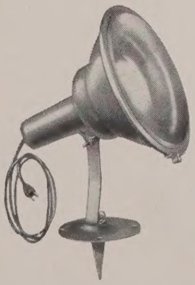
Type RME
Section 201
Pages
21 and 22



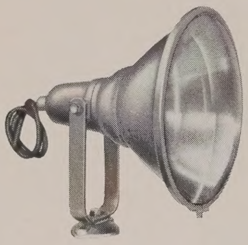
Type RMU
Section 201
Pages
21 and 22



Type RMF
Section 201
Pages
21 and 22



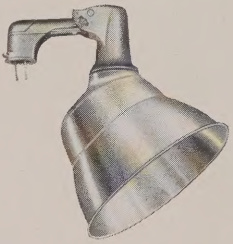
Types
MDB-8
and
MDB-10
Section 201
Pages
23 and 24



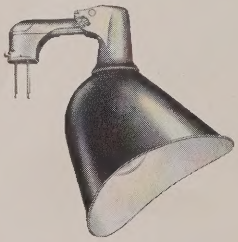
Types
MDB-14
and
MDB-16
Section 201
Pages
25 and 26

Open Floodlights

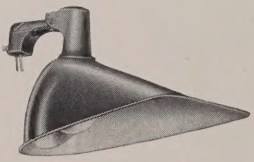
Section 202, Pages 1 to 18



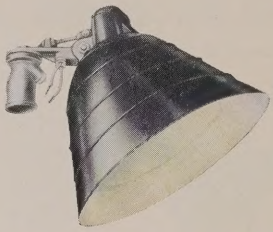
Type MUA
Alumalux
Section 202
Pages
1 to 16



Type MUA
Elliptalux
Section 202
Pages
1 to 16



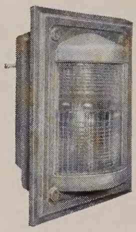
Type MUA
Multalux
Section 202
Pages
1 to 16



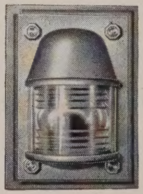
Type MPA-2
Section 202
Pages
17 and 18

Special Floodlights

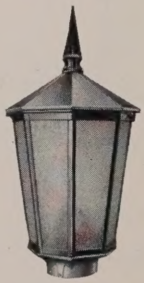
Section 203, Pages 1 to 14



Type VCD-12
Lighting
Unit
Section 203
Pages
1 and 2



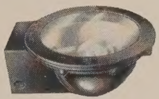
Type VCD-6
Lighting
Unit
Section 203
Pages
3 and 4



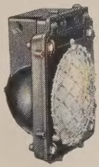
Type GCP-14
Lantern
Section 203
Pages
5 and 6

CROUSE-HINDS

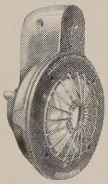
Pictorial Index—Floodlights



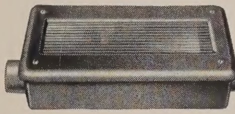
Type RCD-8 Form F Lighting Unit
Section 203
Pages
7 to 10



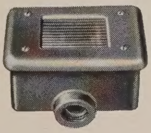
Type RCD-8 Form W Lighting Unit
Section 203
Pages
7 to 10



Type RCDE-8 Pit Light
Section 203
Pages
11 and 12



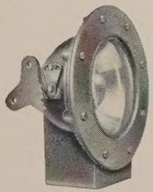
Type FS 25-Watt Lighting Unit
Section 203
Pages
13 and 14



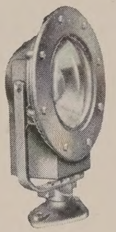
Type FS 6-Watt Lighting Unit
Section 203
Pages
13 and 14

Underwater Floodlights

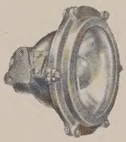
Section 204, Pages 1 to 8



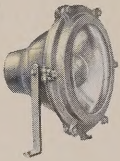
Type FCS-8 Wet-Niche
Section 204
Pages
1 and 2



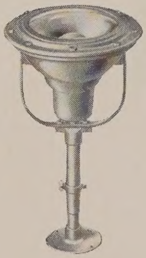
Type FCS-8 Trunnion
Section 204
Pages
1 and 2



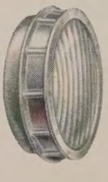
Type FDS
Section 204
Pages
3 to 5



Type FDE
Section 204
Pages
3 to 5



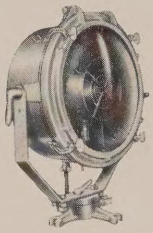
Type FDV
Section 204
Pages
3 to 5



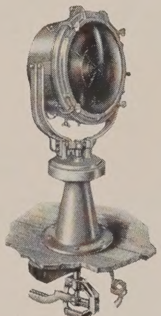
Porthole Ring
Section 204
Pages
7 and 8

Searchlights

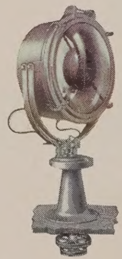
Section 205, Pages 1 to 4



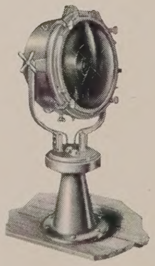
Type DCE
Section 205
Pages
1 to 4



Type DCX
Section 205
Pages
1 to 4



Type DCXR
Section 205
Pages
1 to 4



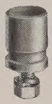
Type DCY
Section 205
Pages
1 to 4

Pictorial Index—Floodlights

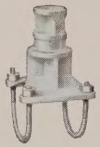
Special Bases and Brackets

For Crouse-Hinds Floodlights

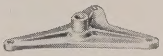
Section 206, Pages 1 and 2



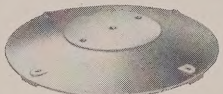
Bolt Base
Section 206
Pages
1 and 2



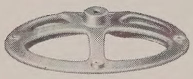
U-bolt Base
Section 206
Pages
1 and 2



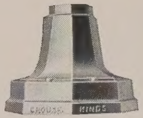
Railroad Base
Section 206
Pages
1 and 2



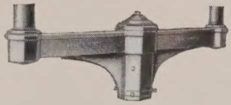
Wheel Base
Section 206
Pages
1 and 2



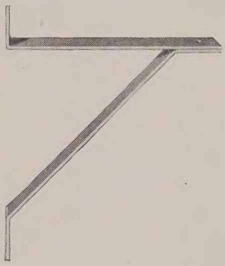
Wheel Base
Section 206
Pages
1 and 2



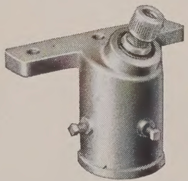
Ornamental Pole Base
Section 206
Pages
1 and 2



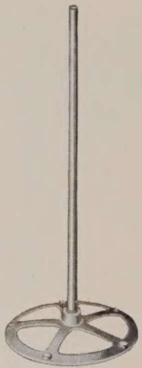
Ornamental Bracket
Section 206
Pages
1 and 2



Pole Bracket
Section 206
Pages
1 and 2



Slip Fitter
Section 206
Pages
1 and 2

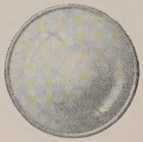


Pedestal Base
Section 206
Pages
1 and 2

Lenses

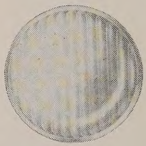
For Crouse-Hinds Floodlights

Section 206, Pages 3 and 4



Plain Lens
Section 206
Pages
3 and 4

Diffusing Lens
Section 206
Pages
3 and 4



Spread Lens
Section 206
Pages
3 and 4

General Index—Floodlights

Description	Section	Page
Accessories	206	1 to 6
ADA-12	201	1, 2
ADE-12	201	3, 4
ADE-14	201	7, 8
ADE-16	201	9, 10
ADR-12	201	5, 6, 17, 18
ADR-14	201	5, 6, 17, 18
Bases and Brackets	206	1, 2
Calculations, Floodlight	208	1 to 8
Cement for Lenses	206	4
Closed Floodlights	201	1 to 26
Color Screens	206	4
DCE-14	205	1 to 4
DCE-16	201 205	17, 18 1 to 4
DCE-18	205	1 to 4
DCE-24	205	1 to 4
DCX-14	205	1 to 4
DCX-16	205	1 to 4
DCX-18	205	1 to 4
DCX-24	205	1 to 4
DCXR-14	205	1 to 4
DCXR-16	205	1 to 4
DCXR-18	205	1 to 4
DCXR-24	205	1 to 4
DCY-14	205	1 to 4
DCY-16	205	1 to 4
DCY-18	205	1 to 4
DCY-24	205	1 to 4
FCS-8	204	1, 2
FDE-14	204	3 to 6
FDE-16	204	3 to 6
FDS-14	204	3 to 6
FDS-16	204	3 to 6
FDV-14	204	3 to 6
FDV-16	204	3 to 6
Floodlights for Fire Fighting	201	17, 18
Floor Lights	203	13, 14
FS	203	13, 14
GCP-14	203	5, 6
Hoods	206	5
Indexes, Floodlight		
Catalog Number	209	7 to 12
General	209	5
Pictorial	209	1 to 4
Installation Suggestions	207	1 to 12
Lamp Receptacles	206	6
Lanterns	203	5, 6
LCE-24	201	15, 16
LCE-1020	201	13, 14
LCE-1120	201	11, 12, 17, 18
Lenses	206	3, 4
Lighting Units	203	1 to 4, 7 to 10, 13, 14
Louvers	206	6
MDB-8	201	23, 24
MDB-10	201	23, 24
MDB-14	201	25, 26
MDB-16	201	25, 26
MPA-2	202	17, 18
MUA	202	1 to 16
Open Floodlights	202	1 to 18
Pit Lights	203	11, 12
Porthole Rings	204	7, 8
RCD-8	203	7 to 10
RCDE-8	201 203	19, 20 11, 12
Reflectors	206	5
RM-10	201	21, 22
RM-12	201	21, 22
RME-10	201	21, 22
RME-12	201	21, 22
RMF-12	201	21, 22
RMU-10	201	21, 22
RMU-12	201	21, 22
Searchlights	205	1 to 4
Special Floodlights	203	1 to 14
Step Lights	203	13, 14
Underwater Floodlights	204	1 to 8
VCD-6	203	3, 4
VCD-12	203	1, 2

CROUSE-HINDS

Catalog Number Index and List Prices—Floodlights

Catalog Number	Description	Schedule	List Price	Section	Page
601A	Lamp receptacle	F	$ 6.50	206	6
1325	Lamp receptacle	F	1.25	206	6
1330	Lamp receptacle	F	1.50	206	6
26067A	RM-12	F	26.00	201	21
29480A	RME-12	F	43.00	201	21
29657A	RMU-12	F	38.00	201	21
29788A	RM-10	F	22.00	201	21
29793A	RMU-10	F	34.00	201	21
29803A	RME-10	F	39.00	201	21
40407A	RM-10	F	28.00	201	21
40408A	RM-12	F	33.00	201	21
40409A	RMU-10	F	40.00	201	21
40410A	RMU-12	F	45.00	201	21
40411A	RME-10	F	45.00	201	21
40412A	RME-12	F	50.00	201	21
40466	LCE-24	F	190.00	201	15
40467	LCE-24	F	190.00	201	15
40468	LCE-24	F	190.00	201	15
40823	ADA-12	F	34.00	201	1
40824	ADA-12	F	34.00	201	1
40832	ADA-12	F	37.00	201	1
40833	ADA-12	F	37.00	201	1
40841	ADA-12	F	37.00	201	1
40842	ADA-12	F	37.00	201	1
40850	ADA-12	F	37.00	201	1
40851	ADA-12	F	37.00	201	1
40859	ADA-12	F	37.00	201	1
40860	ADA-12	F	37.00	201	1
40868	ADA-12	F	37.00	201	1
40869	ADA-12	F	37.00	201	1
41056A	ADE-16	F	85.00	201	9
41058A	ADE-16	F	85.00	201	9
41063	DCE-14	F	175.00	205	2
41065	DCE-14	F	175.00	205	2
41066	DCE-14	F	175.00	205	2
41067	DCE-24	F	400.00	205	2
41214A	ADE-14	F	60.00	201	7
41215A	ADE-14	F	60.00	201	7
41291A	ADE-16	F	85.00	201	9
41293A	ADE-16	F	85.00	201	9
41320	GCP-14	F	*	203	5
41321	GCP-14	F	*	203	5
41322	GCP-14	F	91.00	203	5
41323	GCP-14	F	91.00	203	5
41324	GCP-14	F	91.00	203	5
41325	GCP-14	F	91.00	203	5
41332	RCD-8	R	19.00	203	9
41334	RCD-8	R	19.00	203	9
41335	VCD-12	F	125.00	203	1
41337	GCP-14	F	*	203	5
41338	GCP-14	F	*	203	5
41353	DCE-16	F	200.00	205	2
41354	DCE-16	F	200.00	205	2
41398	VCD-12	F	95.00	203	1
41401	GCP-14	F	$ 91.00	203	5
41402	GCP-14	F	91.00	203	5
41409	RCD-8	R	20.00	203	9
41410	RCD-8	R	20.00	203	9
41424	RCD-8	R	19.00	203	9
41425	RCD-8	R	19.00	203	9
41427	RCD-8	R	20.00	203	9
41549	LCE-1120	F	140.00	201	11
41550	LCE-1120	F	140.00	201	11
41591	FCS-8	F	45.00	204	1
41669	FCS-8	F	45.00	204	1
41670	FCS-8	F	45.00	204	1
41671	FCS-8	F	45.00	204	1
41672	FCS-8	F	55.00	204	1
41673	FCS-8	F	55.00	204	1
41674	FCS-8	F	55.00	204	1
41675	FCS-8	F	55.00	204	1
41684	FCS-8	F	47.00	204	1
41685	FCS-8	F	47.00	204	1
41686	FCS-8	F	47.00	204	1
41687	FCS-8	F	47.00	204	1
41688	FCS-8	F	58.00	204	1
41689	FCS-8	F	58.00	204	1
41690	FCS-8	F	58.00	204	1
41691	FCS-8	F	58.00	204	1
41696	MPA-2	F	57.00●	202	17
41697	MPA-2	F	59.00●	202	17
41698	MPA-2	F	58.00●	202	17
41702	RCDE-8	R	59.50	203	11
41704	RCDE-8	R	62.50	203	11
41705	RCDE-8	R	72.00	203	11
41706	RCDE-8	R	69.00	203	11
41707	RCDE-8	R	62.50	203	11
41708	RCDE-8	R	59.50	203	11
41709	RCDE-8	R	88.00	203	11
41710	RCDE-8	R	85.00	203	11
41711	RCDE-8	R	63.50	203	11
41712	RCDE-8	R	60.50	203	11
41713	RCDE-8	R	74.00	203	11
41714	RCDE-8	R	71.00	203	11
41715	RCDE-8	R	63.50	203	11
41716	RCDE-8	R	60.50	203	11
41717	RCDE-8	R	89.00	203	11
41718	RCDE-8	R	86.00	203	11
41719A	RCDE-8	F	75.00	201	19
41720A	RCDE-8	F	71.75	201	19
41721A	RCDE-8	F	85.00	201	19
41722A	RCDE-8	F	81.75	201	19
41723A	RCDE-8	F	75.00	201	19
41724A	RCDE-8	F	71.75	201	19
41725A	RCDE-8	F	102.00	201	19
41726A	RCDE-8	F	98.75	201	19
41727A	RCDE-8	F	76.00	201	19
41728A	RCDE-8	F	72.75	201	19
41970	GCP-14	F	76.00	203	5
41971	GCP-14	F	76.00	203	5
41972	GCP-14	F	76.00	203	5
41973	GCP-14	F	76.00	203	5

Schedules of discounts, sent on request.
*Price on application. ●Denotes price change.

Catalog Number Index and List Prices—Floodlights

Catalog Number	Description	Schedule	List Price	Section	Page
41974	GCP-14	F	$ 76.00	203	5
41975	GCP-14	F	76.00	203	5
41976	GCP-14	F	*	203	5
41977	GCP-14	F	*	203	5
41978	GCP-14	F	*	203	5
41979	GCP-14	F	*	203	5
41983	DCE-16	F	200.00	201 205	18 2
41986	DCE-24	F	400.00	205	2
41989A	RCDE-8	F	72.00	201	19
41990A	RCDE-8	F	68.75	201	19
41991A	RCDE-8	F	72.00	201	19
41992A	RCDE-8	F	68.75	201	19
41993A	RCDE-8	F	99.00	201	19
41994A	RCDE-8	F	95.75	201	19
41997	FCS-8	F	52.00	204	1
41998	FCS-8	F	62.00	204	1
41999	FCS-8	F	52.00	204	1
42000	FCS-8	F	62.00	204	1
42001	FCS-8	F	52.00	204	1
42002	FCS-8	F	62.00	204	1
42003	FCS-8	F	52.00	204	1
42004	FCS-8	F	62.00	204	1
42005	FCS-8	F	49.00	204	1
42006	FCS-8	F	61.00	204	1
42007	FCS-8	F	49.00	204	1
42008	FCS-8	F	61.00	204	1
42009	FCS-8	F	49.00	204	1
42010	FCS-8	F	61.00	204	1
42011	FCS-8	F	49.00	204	1
42012	FCS-8	F	61.00	204	1
42013	FDS-16	F	128.00	204	3
42014	FDS-16	F	102.00	204	3
42015	FDS-16	F	125.00	204	3
42016	FDS-16	F	100.00	204	3
42017	FDE-16	F	130.00	204	3
42018	FDE-16	F	105.00	204	3
42019	FDV-16	F	132.00	204	3
42020	FDV-16	F	107.00	204	3
42022	FDS-14	F	113.00	204	3
42023A	ADR-12	F	41.00	201	5,18
42024A	ADR-12	F	41.00	201	5,18
42032	FDS-14	F	93.00	204	3
42033	FDS-14	F	110.00	204	3
42034	FDS-14	F	90.00	204	3
42035	FDE-14	F	115.00	204	3
42036	FDE-14	F	95.00	204	3
42037	FDV-14	F	117.00	204	3
42038	FDV-14	F	97.00	204	3
42087	ADE-16	F	85.00	204	7
42088	ADE-14	F	60.00	204	7
42102	ADE-16	F	66.50	204	7
42103	ADE-14	F	47.00	204	7
42104	DCE-14	F	175.00	205	2
42148	DCE-18	F	330.00	205	2
42149	DCE-18	F	330.00	205	2
42150	DCE-18	F	330.00	205	2
42157	DCE-24	F	400.00	205	2
42173	MUA	F	19.00●	202	9
42174	MUA	F	$21.00●	202	9
42175	MUA	F	20.00●	202	9
42176	Head and support	F	9.00●	202	5,9,13
42177	Head and support	F	11.00●	202	5,9,13
42178	Head and support	F	10.00●	202	5,9,13
42179	MUA	F	25.00●	202	9
42180	MUA	F	27.00●	202	9
42181	MUA	F	26.00●	202	9
42187	MUA	F	22.00●	202	9
42188	MUA	F	24.00●	202	9
42189	MUA	F	23.00●	202	9
42204	VCD-6	F	45.00	203	3
42205	VCD-6	F	45.00	203	3
42206	MUA	F	30.00●	202	13
42207	MUA	F	28.00●	202	13
42208	MUA	F	29.00●	202	13
42209	MUA	F	33.00●	202	13
42210	MUA	F	31.00●	202	13
42211	MUA	F	32.00●	202	13
42212	MUA	F	36.00●	202	13
42213	MUA	F	34.00●	202	13
42214	MUA	F	35.00●	202	13
42380	Head and support	F	7.00●	202	5,9,13
42381	MUA	F	17.00●	202	9
42382	MUA	F	23.00●	202	9
42384	MUA	F	20.00●	202	9
42387	MUA	F	26.00●	202	13
42388	MUA	F	29.00●	202	13
42389	MUA	F	32.00●	202	13
42391	MUA	F	24.00●	202	5
42392	MUA	F	22.00●	202	5
42393	MUA	F	23.00●	202	5
42394	MUA	F	27.00●	202	5
42395	MUA	F	25.00●	202	5
42396	MUA	F	26.00●	202	5
42397	MUA	F	34.00●	202	5
42398	MUA	F	32.00●	202	5
42399	MUA	F	33.00●	202	5
42400	MUA	F	20.00●	202	5
42401	MUA	F	23.00●	202	5
42402	MUA	F	30.00●	202	5
42403	MDB-8	F	6.50	201	23
42405	MDB-10	F	10.50	201	23
42409	MDB-8	F	9.50	201	23
42411	MDB-10	F	14.50	201	23
42428	ADE-12	F	34.00	201	3
42429	ADE-12	F	34.00	201	3
42430	ADE-12	F	34.00	201	3
42431	ADE-12	F	34.00	201	3
42434	MDB-8	F	8.50	201	23
42435	MDB-8	F	8.50	201	23
42436	MDB-8	F	8.50	201	23
42437	MDB-8	F	8.50	201	23
42438	MDB-10	F	14.50	201	23
42439	MDB-10	F	14.50	201	23
42440	MDB-10	F	14.50	201	23
42441	MDB-10	F	14.50	201	23
42442	MDB-8	F	11.50	201	23
42443	MDB-8	F	11.50	201	23

Schedules of discounts, sent on request.
*Price on application. ●Denotes price change.

Catalog Number Index and List Prices—Floodlights

Catalog Number	Description	Schedule	List Price	Section	Page
42444	MDB-8	F	$ 11.50	201	23
42445	MDB-8	F	11.50	201	23
42446	MDB-10	F	18.50	201	23
42447	MDB-10	F	18.50	201	23
42448	MDB-10	F	18.50	201	23
42449	MDB-10	F	18.50	201	23
42461	MDB-14	F	26.00●	201	25
42462	MDB-14	F	31.00●	201	25
42465	MDB-16	F	34.00●	201	25
42466	MDB-16	F	40.00●	201	25
42484	MDB-16	F	35.00●	201	25
42485	MDB-16	F	33.00●	201	25
42486	MDB-16	F	24.50●	201	25
42487	MDB-14	F	27.00●	201	25
42488	MDB-14	F	25.00●	201	25
42489	MDB-14	F	16.50●	201	25
42490	MDB-16	F	34.00●	201	25
42491	MDB-14	F	26.00●	201	25
42492	MDB-16	F	35.00●	201	25
42493	MDB-16	F	33.00●	201	25
42494	MDB-16	F	24.50●	201	25
42495	MDB-14	F	27.00●	201	25
42496	MDB-14	F	25.00●	201	25
42497	MDB-14	F	16.50●	201	25
42498	MDB-16	F	41.00●	201	25
42499	MDB-16	F	39.00●	201	25
42500	MDB-16	F	30.50●	201	25
42721	MDB-14	F	32.00●	201	25
42722	MDB-14	F	30.00●	201	25
42723	MDB-14	F	21.50●	201	25
42724	Head and support	F	8.50●	201	26
42725	Head and support	F	10.50●	201	26
42726	Head and support	F	9.50●	201	26
42727	ADA-12	F	34.00	201	1
42728	ADA-12	F	37.00	201	1
42729	ADA-12	F	37.00	201	1
42730	ADA-12	F	37.00	201	1
42731	ADA-12	F	37.00	201	1
42732	ADA-12	F	37.00	201	1
42739	ADE-14	F	60.00	201	7
42740	ADE-14	F	60.00	201	7
42741	ADE-16	F	85.00	201	9
42742	ADE-16	F	85.00	201	9
42743	ADE-16	F	85.00	201	9
42744	ADE-16	F	85.00	201	9
42745	LCE-1120	F	140.00	201	11,18
42746	LCE-1120	F	140.00	201	11
42747	VCD-6	F	55.00	203	3
42748	VCD-6	F	55.00	203	3
42751	ADE-14	F	60.00	201	7
42752	ADE-14	F	60.00	201	7
42753	ADE-14	F	60.00	201	7
42754	ADE-14	F	60.00	201	7
42778	LCE-1020	F	175.00	201	13
42779	LCE-1020	F	175.00	201	13
42781	LCE-24	F	190.00	201	15
42782	LCE-24	F	190.00	201	15
42783A	ADR-14	F	63.00	201	5,18
42784A	ADR-14	F	63.00	201	5,18
42785	FCS-8	F	$ 45.00	204	1
42786	FCS-8	F	45.00	204	1
42787	FCS-8	F	45.00	204	1
42788	FCS-8	F	45.00	204	1
42789	FCS-8	F	52.00	204	1
42790	FCS-8	F	52.00	204	1
42791	FCS-8	F	52.00	204	1
42792	FCS-8	F	52.00	204	1
42793	FCS-8	F	47.00	204	1
42794	FCS-8	F	47.00	204	1
42795	FCS-8	F	47.00	204	1
42796	FCS-8	F	47.00	204	1
42797	FCS-8	F	49.00	204	1
42798	FCS-8	F	49.00	204	1
42799	FCS-8	F	49.00	204	1
42800	FCS-8	F	49.00	204	1
42801	FCS-8	F	55.00	204	1
42802	FCS-8	F	55.00	204	1
42803	FCS-8	F	55.00	204	1
42804	FCS-8	F	55.00	204	1
42805	FCS-8	F	62.00	204	1
42806	FCS-8	F	62.00	204	1
42807	FCS-8	F	62.00	204	1
42808	FCS-8	F	62.00	204	1
42809	FCS-8	F	58.00	204	1
42810	FCS-8	F	58.00	204	1
42811	FCS-8	F	58.00	204	1
42812	FCS-8	F	58.00	204	1
42813	FCS-8	F	61.00	204	1
42814	FCS-8	F	61.00	204	1
42815	FCS-8	F	61.00	204	1
42816	FCS-8	F	61.00	204	1
42825	FDS-14	F	93.00	204	3
42826	FDS-14	F	113.00	204	3
42827	FDS-14	F	90.00	204	3
42828	FDS-14	F	110.00	204	3
42829	FDE-14	F	95.00	204	3
42830	FDE-14	F	115.00	204	3
42831	FDV-14	F	97.00	204	3
42832	FDV-14	F	117.00	204	3
42833	FDS-16	F	102.00	204	3
42834	FDS-16	F	128.00	204	3
42835	FDS-16	F	100.00	204	3
42836	FDS-16	F	125.00	204	3
42837	FDE-16	F	105.00	204	3
42838	FDE-16	F	130.00	204	3
42839	FDV-16	F	107.00	204	3
42840	FDV-16	F	132.00	204	3
42841	LCE-24	F	190.00	201	15
42842	DCY-14	F	200.00	205	2
42843	DCY-14	F	200.00	205	2
42844	DCX-14	F	240.00	205	2
42845	DCXR-14	F	240.00	205	2
42846	DCX-14	F	240.00	205	2
42847	DCXR-14	F	240.00	205	2
42848	DCY-16	F	225.00	205	2
42849	DCY-16	F	225.00	205	2
42850	DCX-16	F	265.00	205	2
42851	DCX-16	F	265.00	205	2
42852	DCXR-16	F	265.00	205	2

Schedules of discounts, sent on request. ●Denotes price change.

Catalog Number Index and List Prices—Floodlights

Catalog Number	Description	Schedule	List Price	Section	Page
42853	DCXR-16	F	$265.00	205	2
42854	DCY-18	F	355.00	205	2
42855	DCY-18	F	355.00	205	2
42856	DCX-18	F	395.00	205	2
42857	DCX-18	F	395.00	205	2
42858	DCXR-18	F	395.00	205	2
42859	DCXR-18	F	395.00	205	2
42860	DCY-24	F	425.00	205	2
42861	DCY-24	F	425.00	205	2
42862	DCX-24	F	465.00	205	2
42863	DCX-24	F	465.00	205	2
42864	DCXR-24	F	465.00	205	2
42865	DCXR-24	F	465.00	205	2
42874	ADE-12	F	34.00	201	3
42875	ADE-12	F	34.00	201	3
42877	FS	F	3.60	203	13
42878	FS	F	5.10	203	13
42879	FS	F	3.50	203	13
42880	FS	F	5.00	203	13
42904	FS	F	7.00	203	13
42905	FS	F	7.30	203	13
42906	FS	F	10.00	203	13
42907	FS	F	10.30	203	13
42908	FS	F	3.60	203	13
42909	FS	F	3.70	203	13
42910	FS	F	5.10	203	13
42911	FS	F	5.20	203	13
42912	FS	F	7.20	203	13
42913	FS	F	7.40	203	13
42914	FS	F	10.20	203	13
42915	FS	F	10.40	203	13
42916	FS	F	3.80	203	13
42917	FS	F	4.05	203	13
42918	FS	F	5.30	203	13
42919	FS	F	5.55	203	13
42920	ADE-14	F	60.00	201	7
42921	ADE-14	F	60.00	201	7
42922	ADE-14	F	60.00	201	7
42923	ADE-14	F	60.00	201	7
42930	RMF-12	F	40.00	201	21
42931	RMF-12	F	33.00	201	21
42932	ADE-16	F	85.00	201	9
42933	ADE-16	F	85.00	201	9
42950	ADR-12	F	41.00	201	5,18
42951	ADR-14	F	63.00	201	5,18
45669	Ornamental base	T	17.00	206	2
45889	Ornamental base	T	17.00	206	2
CGB295A	Connector	F	1.00	201	8,10
HL241	Color screen	F	13.00	204 206	4 4
HL242	Color screen	F	13.00	204 206	4 4
HL243	Color screen	F	13.00	204 206	4 4
HL244	Color screen	F	13.00	204 206	4 4
HL439	Reflector	F	9.00	206	5

Catalog Number	Description	Schedule	List Price	Section	Page
HL650	Lens	F	$ 8.00	206	4
HL651	Lens	F	8.00	206	4
HL674	Lamp receptacle	F	.75	206	6
HL749	Reflector	F	9.00	206	5
HL2005	Lens	F	8.00	206	4
HL2006	Lens	F	8.00	206	4
HL2009	Lens	F	8.00	206	4
HL2012	Lens	F	8.00	206	4
HL2013	Lens	F	8.00	206	4
HL2014	Lens	F	8.00	206	4
HL2015	Lens	F	8.00	206	4
HL2016	Lens	F	8.00	206	4
HL2017	Lens	F	8.00	206	4
HL2018	Lens	F	8.00	206	4
HL2019	Lens	F	8.00	206	4
HL2051	Lens	F	8.00	206	4
HL2052	Lens	F	8.00	206	4
HL2054	Lens	F	8.00	206	4
HL2128	Lamp receptacle	F	2.00	206	6
HL2153	Lens	F	40.00	206	4
HL2154	Lens	F	40.00	206	4
HL2156	Lens	F	40.00	206	4
HL2337	Reflector	F	23.00	206	5
HL2472	Louvers	F	6.75	201 206	2,6 6
HL2630	Pole bracket	F	9.00	206	2
HL2632	Pole bracket	F	7.50	206	2
HL2667	Louvers	F	20.00	201 206	16 6
HL2693	Railroad base	F	3.00	206	2
HL2714	U-bolt base	F	3.75	206	2
HL2748	Lens	F	35.00	206	4
HL2889	Reflector	F	21.00	206	5
HL2890	Reflector	F	21.00	206	5
HL2898	Reflector	F	12.00	206	5
HL3076	Adapter	F	1.85	201	6
HL3090	Lens	F	6.00●	201 206	26 4
HL3123	Ornamental bracket	F	32.00	206	2
HL3154	Porthole ring	F	60.00	204	7
HL3214	Hood	F	7.00	201 206	10 5
HL3239	Color screen	F	9.00	204 206	4 4
HL3240	Color screen	F	9.00	204 206	4 4
HL3241	Color screen	F	9.00	204 206	4 4
HL3242	Color screen	F	9.00	204 206	4 4
HL3247	Slip fitter	F	6.00	206	2
HL3251	Lamp receptacle	F	7.00	206	6
HL3261	Louvers	F	10.00	201 206	6,8 6
HL3328	Louvers	F	17.00	201 206	12,14 6
HL3396	Hood	F	10.00	201 206	12,14 5
HL3399	Hood	F	7.00	201 206	8 5

Schedules of discounts, sent on request. ●Denotes price change.

Catalog Number Index and List Prices—Floodlights

Catalog Number	Description	Schedule	List Price	Section	Page
HL3526	Bolt base	F	$ 2.50	201 206	2 2
HL3538	Hood	F	10.00	206	5
HL3681	Slip-fitter base	F	6.00	206	2
HL3685	Ornamental bracket	F	32.00	206	2
HL3720	Pedestal base	F	5.00	206	2
HL3727	Lamp receptacle	F	3.00	206	6
HL3862	Reflector	F	22.00	206	5
HL3866	Glass panel	F	*	203	6
HL3867	Glass canopy	F	*	203	6
HL4042	Lens	R	4.00	203	9
HL4079	Lens	R	4.00	203	9
HL4093	Glass panel	F	*	203	6
HL4094	Glass canopy	F	*	203	6
HL4106	Porthole ring	F	40.00	204	7
HL4132	Reflector	F	65.00	206	5
HL4203	Lamp receptacle	F	.60	201 206	23 6
HL4242	Bracket	R	1.00	203	9
HL4243	Bracket	R	1.00	203	9
HL4250	Reflector	F	22.00	206	5
HL4319	Lens	R	4.00	203	9
HL4415	Lens	R	4.00	203	9
HL4455	Lens	R	5.00	203	9
HL4481	Reflector	F	35.00	206	5
HL4482	Reflector	F	40.00	206	5
HL5194	Frame	R	5.00	203	9
HL5290	Lens	F	1.70	204	2
HL5298	Lamp receptacle	F	1.50	201 206	26 6
HL5375	Lens	F	1.70	201 206	23 4
HL5376	Lens	F	1.70	201 206	23 4
HL5377	Lens	F	1.70	201 206	23 4
HL5471	Lens	F	12.50	202	6
HL5507	Hood	F	4.00	202	6
HL5558	Drain hose	F	8.00	204	4
HL5588	Reflector	F	23.00	206	5
HL5591	Color screen	F	6.00	206	4
HL5592	Color screen	F	6.00	206	4
HL5593	Color screen	F	6.00	206	4
HL5594	Color screen	F	6.00	206	4
HL5608	Wheel base	F	3.00	206	2
HL5753	Lens	F	3.70	201	23
HL5754	Lens	F	3.70	201	23
HL5755	Lens	F	3.70	201	23
HL5760	Reflector	F	85.00	206	5
HL5865	Lens	F	40.00	206	4
HL5867	Lens	F	9.50	206	4
HL5868	Lens	F	7.00	206	4
HL5869	Lens	F	17.00	206	4
HL5887	Slip fitter	F	2.00	202	6,10,14
HL5888	Pole bracket	F	1.00	202	6,10,14
HL5903	Reflector	F	10.00●	202	9
HL5904	Reflector	F	16.00●	202	9
HL5905	Refracting screen	F	1.00	201 203	20 12
HL5907	Lamp receptacle	F	.65	202	6,10,14

Catalog Number	Description	Schedule	List Price	Section	Page
HL5908	Reflector	F	$13.00●	202	9
HL5922	Lens	F	16.50	202	6
HL5923	Lens	F	12.50	202	6
HL5924	Reflector	F	3.00	202	10,14
HL5925	Reflector	F	6.00	202	10,14
HL5989	Lamp receptacle	F	1.25	202 206	6,10,14 6
HL6019	Lamp receptacle	F	.60	206	6
HL6035	Reflector	F	9.00	206	5
HL6230	Gasket	F	.20	201 202	26 6,10,14
HL6232	Reflector	F	19.00●	202	13
HL6233	Reflector	F	22.00●	202	13
HL6234	Reflector	F	25.00●	202	13
HL6490	Reflector	F	13.00●	202	5
HL6492	Reflector	F	16.00●	202	5
HL6493	Reflector	F	23.00●	202	5
HL6802	Lens	F	5.00	206	4
HL6803	Lens	F	5.00	206	4
HL6804	Lens	F	9.00●	201 206	26 4
HL6805	Lens	F	9.00●	201 206	26 4
HL6810	Lens	F	9.00●	201 206	26 4
HL6811	Lens	F	5.00	206	4
HL6813	Lens	F	3.50	201 206	23 4
HL6814	Lens	F	3.50	201 206	23 4
HL6815	Lens	F	3.50	201 206	23 4
HL6978	Reflector	F	21.00	206	5
HL7012	Lamp receptacle	F	1.25	206	6
HL7136	Lamp receptacle	F	1.70	206	6
HL8079	Lamp receptacle	F	1.25	206	6
HL8130	Lens	F	8.00	206	4
HL8509	Lamp receptacle	F	.75	206	6
HL8518	Reflector	F	45.00	206	5
HL8622	Hood	F	13.00†	206	5
HL8706	Hood	F	12.00	201 206	16 5
HL8738	Lens	F	8.00	206	4
HL8751	Lamp receptacle	F	1.50	206	6
HL9012	Cement	F	1.25	206	4
HL9016	Lens	F	17.00	206	4
HL9017	Lens	F	17.00	206	4
HL9018	Lens	F	17.00	206	4
HL9019	Lens	F	35.00	206	4
HL9020	Lens	F	35.00	206	4
HL9021	Lens	F	35.00	206	4
HL9093	Hood	F	6.50	206	5
HL9118	Reflector	F	40.00	206	5
HL9119	Reflector	F	45.00	206	5
HL9131	Lamp receptacle	F	1.25	206	6
HL9151	Lens	F	6.00●	201 206	26 4
HL9153	Lens	F	6.00●	201 206	26 4
HL9314	Lens	F	35.00	206	4

Schedules of discounts, sent on request.
*Price on application. †List additional. ●Denotes price change.

Catalog Number Index and List Prices—Floodlights

Catalog Number	Description	Schedule	List Price	Section	Page
HL9452	. Reflector	F	$ 50.00	206	5
HL9462	. Wheel base	F	9.00	206	2
HL9875	. Reflector	F	130.00	206	5
KL133	. Reflector	F	15.00	206	5
KL144	. Reflector	F	15.00	206	5
KL210	. Reflector	F	35.00	206	5
KL226	. Hood	F	4.00	202	6
KL235	. Reflector	F	23.00	206	5
KL315	. Lens	F	.50	203	14
KL316	. Cover	F	1.75	203	14
KL318	. Cover	F	3.25	203	14
KL320	. Lamp receptacle	F	.60	203	14
KL321	. Receptacle	F	.90	203	14
KL323	. Lamp receptacle	F	.75	203	14
KL325	. Lens	F	1.00	203	14
KL326	. Cover	F	3.00	203	14
KL328	. Cover	F	6.00	203	14
KL330	. Receptacle	F	1.20	203	14
KL393	. Lamp receptacle	F	1.90	202	6,10,14
KL397	. Slip fitter	F	2.00	201	26
KL399	. Hood	F	5.50	201	26
KL506	. Hood	F	6.50	201	26
KL507	. Lens	F	7.50	201	23
KL508	. Lens	F	7.50	201	23
KL509	. Lens	F	7.50	201	23
KL510	. Lens	F	7.50	201	23
KL511	. Lens	F	$ 3.70	201	23
KL577	. Lamp receptacle	F	6.00	201 206	4 6
KL607	. Hood	F	4.50	206	5
KL619	. Reflector	F	23.00	206	5
KL627	. Louvers	F	10.00	201 206	10 6
KL661	. Louvers	F	6.75	201 206	4 6
KL662	. Reflector	F	6.25	203 206	9 5
KL663	. Reflector	F	9.00	206	5
KL664	. Reflector	F	9.00	206	5
KL665	. Reflector	F	45.00	206	5
KL666	. Reflector	F	3.00	206	5
KL667	. Reflector	F	5.00	206	5
KL668	. Reflector	F	7.00	206	5
KL669	. Reflector	F	12.00	206	5
KL670	. Reflector	F	33.00	206	5
KL673	. Reflector	F	21.00	206	5
KL674	. Reflector	F	40.00	206	5
KL675	. Reflector	F	45.00	206	5
KL685	. Reflector	F	9.00	206	5
KL686	. Reflector	F	14.00	206	5
KL738	. Hood	F	4.50	201 206	21 5

Schedules of discounts, sent on request.

CROUSE-HINDS

Pictorial Index

Vaportight Lighting Fixtures

All References are to Condulet Catalog 2500

V Series, *Screw Guard*

Condulets
Section 25, Pages 2 to 4

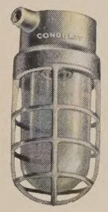
Condulets with Reflector
Section 25, Pages 5 to 7

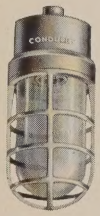
Globes
Section 25, Pages 8 and 9

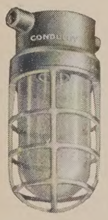
Guards
Section 25, Pages 8 and 11

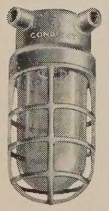
Reflectors
Section 25, Page 9

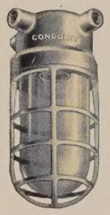
Lamp Receptacle
Section 25, Page 10

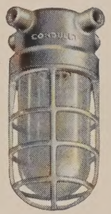

Type V
Screw
Guard
Section 25
Page 2

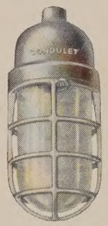

Type VA
Screw
Guard
Section 25
Page 2

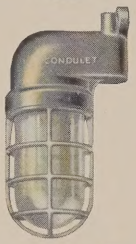

Type VC
Screw
Guard
Section 25
Page 2

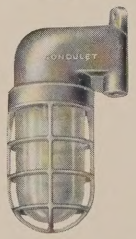

Type VL
Screw
Guard
Section 25
Page 2

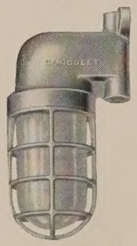

Type VT
Screw
Guard
Section 25
Page 3

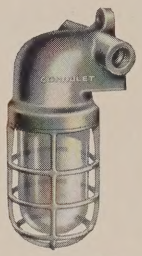

Type VX
Screw
Guard
Section 25
Page 3

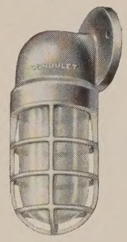

Type VDA
Screw
Guard
Section 25
Page 3

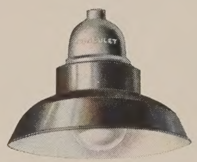

Type VE
Screw
Guard
Section 25
Page 3


Type VF
Screw
Guard
Section 25
Page 4


Type VD
Screw
Guard
Section 25
Page 4


Type VJ
Screw
Guard
Section 25
Page 4


Type VG
Screw
Guard
Section 25
Page 4


V Series
Screw
Guard
With
Reflector
Section 25
Pages
5 to 7

V and VH Series
Clamp Guard

Condulets
Section 25, Pages 2 to 4, and 13

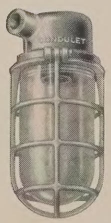
Condulets with Reflector
Section 25, Pages 5 to 7

Globes
Section 25, Pages 8 and 9

Guards
Section 25, Pages 8 and 11

Reflectors
Section 25, Page 9

Lamp Receptacle
Section 25, Page 10


Types
V and VH
Clamp
Guard
Section 25
Page 2

Continued on page 2P

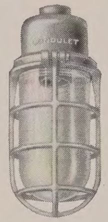
CROUSE-HINDS

Pictorial Index

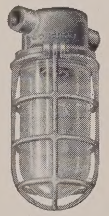
Vaportight Lighting Fixtures

All References are to Condulet Catalog 2500

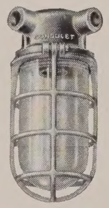
V and VH Series, *Clamp Guard*—Cont'd



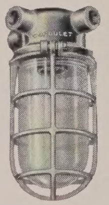
Types VA and VHA ***Clamp Guard***
Section 25
Page 2



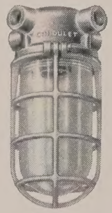
Types VC and VHC ***Clamp Guard***
Section 25
Page 2



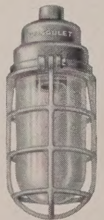
Types VL and VHL ***Clamp Guard***
Section 25
Page 2



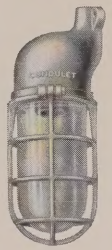
Types VT and VHT ***Clamp Guard***
Section 25
Page 3



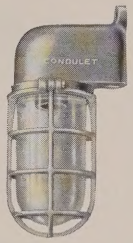
Types VX and VHX ***Clamp Guard***
Section 25
Page 3



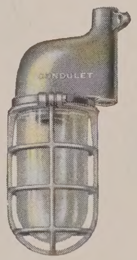
Types VDA and VHDA ***Clamp Guard***
Section 25
Page 3



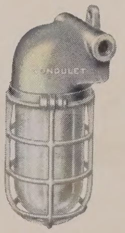
Types VE and VHE ***Clamp Guard***
Section 25
Page 3



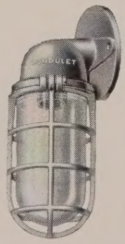
Types VF and VHF ***Clamp Guard***
Section 25
Page 4



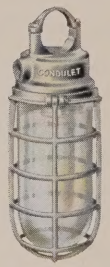
Types VD and VHD ***Clamp Guard***
Section 25
Page 4



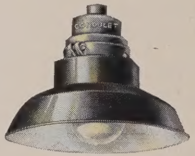
Types VJ and VHJ ***Clamp Guard***
Section 25
Page 4



Types VG and VHG ***Clamp Guard***
Section 25
Page 4



Types VR and VHR ***Clamp Guard***
Section 25
Page 13

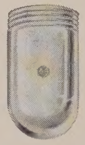


V and VH Series ***Clamp Guard*** **With Reflector**
Section 25
Pages 5 to 7

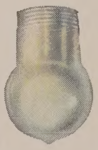
Globes

For V Series, *Screw Guard* and V and VH Series, *Clamp Guard* Condulets

Section 25, Pages 8 and 9



Straight Globe
Section 25
Page 8

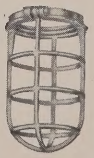


Pear-Shaped Globe
Section 25
Page 9

Guards

For V Series, *Screw Guard* and V and VH Series, *Clamp Guard* Condulets

Section 25, Page 8



Clamp Guard
Section 25
Page 8

CROUSE-HINDS

Pictorial Index

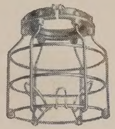
Vaportight Lighting Fixtures

All References are to Condulet Catalog 2500

Guards

For Use with Pear-Shaped Globes For V Series, *Screw Guard* and V and VH Series, *Clamp Guard* Condulets

Section 25, Page 8

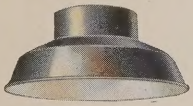


Clamp Guard
Section 25
Page 8

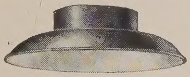
Reflectors

For V Series, *Screw Guard* and V and VH Series, *Clamp Guard* Condulets

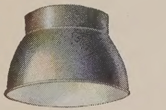
Section 25, Page 9



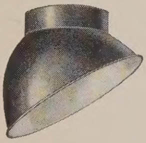
Dome Reflector
Section 25
Page 9



Shallow Bowl Reflector
Section 25
Page 9



Deep Bowl Reflector
Section 25
Page 9

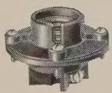


Angle Reflector
Section 25
Page 9

Lamp Receptacle

For V Series, *Screw Guard* and V and VH Series, *Clamp Guard* Condulets

Section 25, Page 10



Lamp Receptacle
Section 25
Page 10

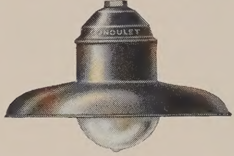
Type VDB

Fixtures with Reflector
Section 25, Page 11

Reflectors
Section 25, Page 11

Globes
Section 25, Page 11

Basket Guards
Section 25, Page 11

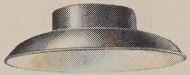


Type VDB
Section 25
Page 11

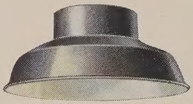
Reflectors

For Type VDB Fixtures

Section 25, Page 11



Shallow Bowl Reflector
Section 25
Page 11

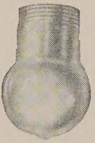


Dome Reflector
Section 25
Page 11

Globes

For Type VDB Fixtures

Section 25, Page 11

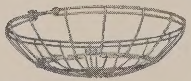


Pear-Shaped Globe
Section 25
Page 11

Basket Guards

For Type VDB Fixtures

Section 25, Page 11

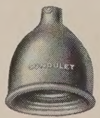


Basket Guard
Section 25
Page 11

Type VDA

Condulets

Section 25, Page 12



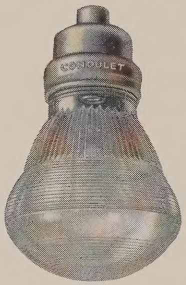
Type VDA
Section 25
Page 12

Holophane Refractors

For Use with V Series, *Screw Guard* and V and VH Series, *Clamp Guard* Condulets

Condulets
Section 25, Pages 2 to 4, and 13

Adapters
Section 25, Page 12



Type VA *Clamp Guard* With Holophane Refractor
Section 25
Page 12

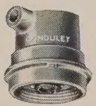
V Series, *Screw Guard*

Condulets with Adapter For Holophane Refractors

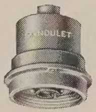
Section 25, Page 12A

Adapter
Section 25, Page 12A

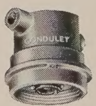
Lamp Receptacle
Section 25, Page 10



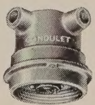
Type V *Screw Guard*
Section 25
Page 12A



Type VA *Screw Guard*
Section 25
Page 12A



Type VC *Screw Guard*
Section 25
Page 12A



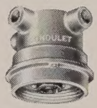
Type VL *Screw Guard*
Section 25
Page 12A

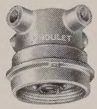
Continued on page 4P

Pictorial Index
Vaportight Lighting Fixtures

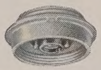
All References are to Condulet Catalog 2500

V Series, *Screw Guard*—Cont'd


Type VT
Screw Guard
Section 25
Page 12A

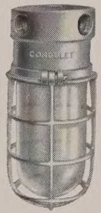

Type VX
Screw Guard
Section 25
Page 12A

Adapter
For V Series Condulets, *Screw Guard*
Section 25, Page 12A


Adapter
Section 25
Page 12A

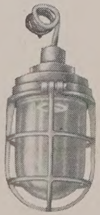
Type VXHA, *Clamp Guard*

Condulets
Section 25, Page 12B
Adapter
Section 25, Page 12B
Globes
Section 25, Pages 8 and 9
Guards
Section 25, Pages 8 and 11
Reflectors
Section 25, Page 9


Type VXHA
Clamp Guard
Section 25
Page 12B

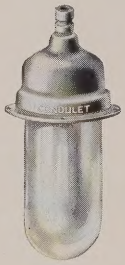
Type VDS, *Clamp Guard*

Condulets
Section 25, Page 13
Globes
Section 25, Pages 8 and 9
Guards
Section 25, Page 8


Type VDS
Section 25
Page 13

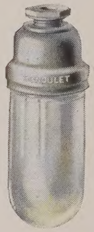
Type VDA

Condulets
Section 25, Page 14
Pyrex Globes
Section 25, Page 8


Type VDA
Section 25
Page 14

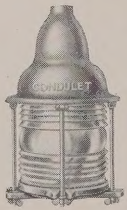
Type VDA

Condulets
Section 25, Page 14
Pyrex Globes
Section 25, Page 8

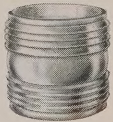

Type VDA
Section 25
Page 14

Type WV

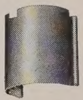
Condulets
Section 25, Page 15
Fresnel Lenses
Section 25, Page 15
Shades
Section 25, Page 16
Hoods
Section 25, Page 16
FK Condulets
Section 25, Page 16


Type WV
Section 25
Page 15

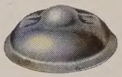
Fresnel Lenses
For Type WV Condulets
Section 25, Page 15


Fresnel Lens
Section 25
Page 15

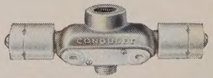
Shades
For Type WV Condulets
Section 25, Page 16


Shade
Section 25
Page 16

Hoods
For Type WV Condulets
Section 25, Page 16

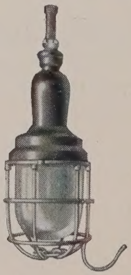

Type WVH
Section 25
Page 16

Type FK
For Use with Type WV Condulets
Section 25, Page 16


Type FK
Section 25
Page 16

Type VS
Screw Guard and *Clamp Guard*

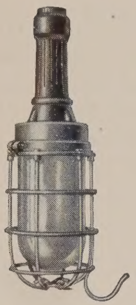
Hand Lamps
Section 30, Page 1
Globes
Section 30, Page 1
Guards
Section 30, Page 1
Lamp Receptacle
Section 30, Page 1


Type VS
Screw Guard
Section 30
Page 1

Pictorial Index

Vaportight Lighting Fixtures

All References are to Condulet Catalog 2500



Type VS
Clamp Guard
Section 30
Page 1

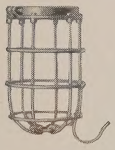
Globes

For Type VS Hand Lamps
Screw Guard* and *Clamp Guard
Section 30, Page 1

Globe
Section 30
Page 1

Guards

For Type VS Hand Lamps
Screw Guard* and *Clamp Guard
Section 30, Page 1



Clamp Guard
Section 30
Page 1

Type VS

Hand Lamps
Section 30, Page 2A
Globes
Section 30, Page 2A
Guards
Section 30, Page 2A

Type VS
Section 30
Page 2A

Globes

For Type VS Hand Lamps
Section 30, Page 2A

Globe
Section 30
Page 2A

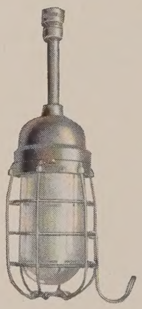
Guards

For Type VS Hand Lamps
Section 30, Page 2A

Guard
Section 30
Page 2A

Type VS, *Screw Guard*

Hand Lamp
Section 30, Page 3
Globes
Section 30, Page 3
Guard
Section 30, Page 3



Type VS
Screw Guard
Section 30
Page 3

Globes

For Type VS Hand Lamp
Screw Guard
Section 30, Page 3

Globe
Section 30
Page 3

Guard

For Type VS Hand Lamp
Screw Guard
Section 30, Page 3

Screw Guard
Section 30
Page 3

Types LPG and LPH

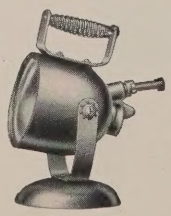
Hand Lamps
Section 30, Page 2

Type LPG
Section 30
Page 2

Type LPH
Section 30
Page 2

Type LM

Lanterns
Section 30, Page 2



Type LM
Section 30
Page 2

CROUSE-HINDS

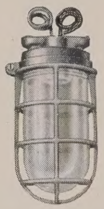
Pictorial Index

Vaportight Lighting Fixtures

All References are to Condulet Catalog 2500

Vaportight Fixtures

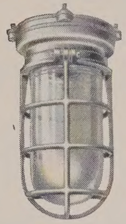
For Obround Series Condulets
Section 5, Page 14



Type ARC
Section 5
Page 14

Vaportight Fixtures

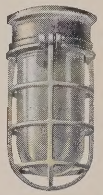
Clamp Guard and *Screw Guard*
For GS Series Condulets
Section 15, Page 18



Type GS
Pendent
Type
Clamp
Guard
Section 15
Page 18

Vaportight Fixtures

Clamp Guard and *Screw Guard*
For SK Series Condulets or Outlet Boxes
Section 25, Page 10C



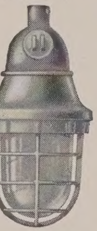
Type ARB
Clamp
Guard
Section 25
Page 10C

Explosion-Proof and Dust-Tight Lighting Fixtures

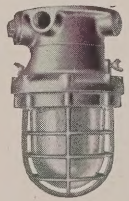
All References are to Condulet Catalog 2500

EV Series

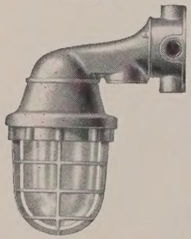
Explosion-Proof
Condulets
Section 85, Page 14
Globes
Section 85, Page 14
Guards
Section 85, Page 14
Reflectors
Section 85, Page 14



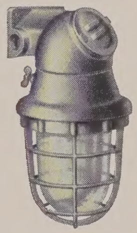
Type EVA
Section 85
Page 14



Type EVCX
Section 85
Page 14



Type EVBX
Section 85
Page 14



Type EVJ
Section 85
Page 14

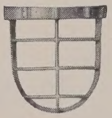
Globes

For EV Series Condulets
Section 85, Page 14

Globe
Section 85
Page 14

Guards

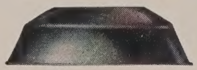
For EV Series Condulets
Section 85, Page 14



Guard
Section 85
Page 14

Reflectors

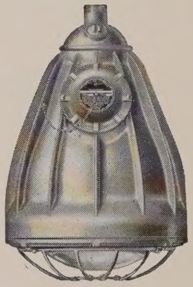
For EV Series Condulets
Section 85, Page 14



Reflector
Section 85
Page 14

Type EVA

Explosion-Proof
Condulet
Section 85, Page 15
Guard
Section 85, Page 15
Coupling
Section 85, Page 15



Type EVA
Section 85
Page 15

Guard

For Type EVA Condulet
Section 85, Page 15

Guard
Section 85
Page 15

Coupling

For Type EVA Condulet
Section 85, Page 15

Type ECF
Section 85
Page 15

CROUSE-HINDS

Pictorial Index

Explosion-Proof and Dust-Tight Lighting Fixtures

All References are to Condulet Catalog 2500

Type EVH

Explosion-Proof and Dust-Tight Hand Lamp

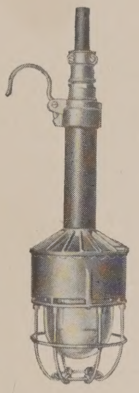
Section 85, Page 16

Globe

Section 85, Page 16

Guard

Section 85, Page 16

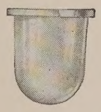


Type EVH
Section 85
Page 16

Globe

For Type EVH Hand Lamp

Section 85, Page 16

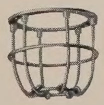


Globe
Section 85
Page 16

Guard

For Type EVH Hand Lamp

Section 85, Page 16



Guard
Section 85
Page 16

Type EVS

Explosion-Proof Portable Lamps

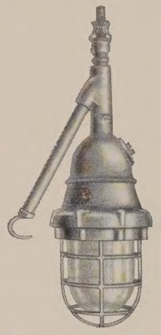
Section 85, Page 16

Globes

Section 85, Page 16

Guards

Section 85, Page 16

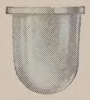


Type EVS
Section 85
Page 16

Globes

For Type EVS Portable Lamps

Section 85, Page 16

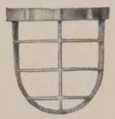


Globe
Section 85
Page 16

Guards

For Type EVS Portable Lamps

Section 85, Page 16



Guard
Section 85
Page 16

Type EVA

Explosion-Proof and Dust-Tight Pilot and Sign Light Condulet

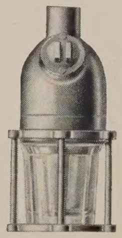
Section 85, Page 17

Guard and Globe Assembly

Section 85, Page 17

Sign Attachment

Section 85, Page 17

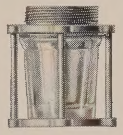


Type EVA
Section 85
Page 17

Guard and Globe Assembly

For Type EVA Condulet

Section 85, Page 17

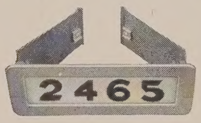


Guard and Globe Assembly
Section 85
Page 17

Sign Attachment

For Type EVA Condulet

Section 85, Page 17



Sign Attachment
Section 85
Page 17

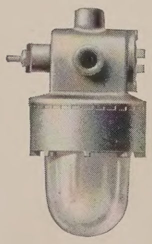
Type EVG

Explosion-Proof and Dust-Tight Condulet

Section 85, Page 31

Globe

Section 85, Page 31

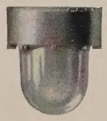


Type EVG
Section 85
Page 31

Globe

For Type EVG Condulet

Section 85, Page 31



Globe
Section 85
Page 31

CROUSE-HINDS

Pictorial Index

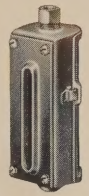
Miscellaneous Lighting Fixtures

All References are to Condulet Catalog 2500

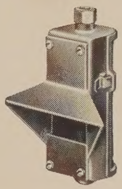
Type LG

Gauge Lamps

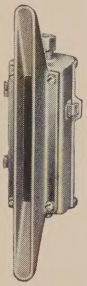
Section 55, Page 13



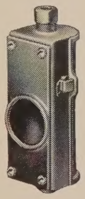
Type LG Water Glass Lamp
Section 55
Page 13



Type LG Multiple Steam and Air Gauge Lamp
Section 55
Page 13



Type LG Lubricator Lamp
Section 55
Page 13



Type LG Single Steam and Air Gauge Lamp
Section 55
Page 13

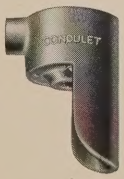
LM Series

Condulets

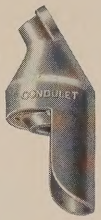
Section 55, Page 14

Lamp Receptacle

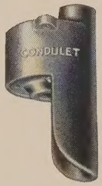
Section 55, Page 16



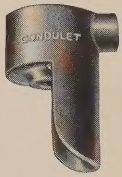
Type LMG
Section 55
Page 14



Type LMD
Section 55
Page 14



Type LMA
Section 55
Page 14



Type LMH
Section 55
Page 14

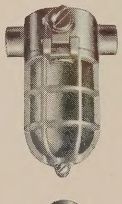
LMK Series

Condulets

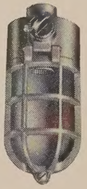
Section 55, Page 14

Key Receptacle

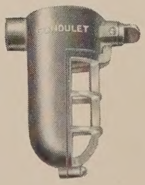
Section 55, Page 14



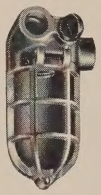
Type LMKJ
Section 55
Page 14



Type LMKA
Section 55
Page 14



Type LMKB
Section 55
Page 14

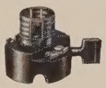


Type LMKL
Section 55
Page 14

Key Receptacle

For LMK Series Condulets

Section 55, Page 14



Key Receptacle
Section 55
Page 14

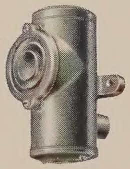
Types LGUA and LGUB

Condulets

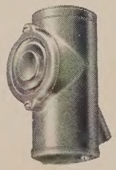
Section 55, Page 15

Lamp Receptacle

Section 55, Page 15



Type LGUA
Section 55
Page 15

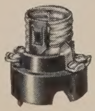


Type LGUB
Section 55
Page 15

Lamp Receptacle

For Types LGUA and LGUB Condulets

Section 55, Page 15



Lamp Receptacle
Section 55
Page 15

CROUSE-HINDS

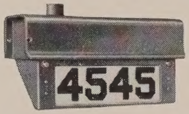
Pictorial Index

Miscellaneous Lighting Fixtures

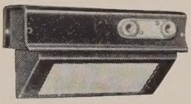
All References are to Condulet Catalog 2500

HN Series

Condulets
Section 70, Page 1



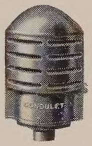
Type HNDS
Section 70
Page 1



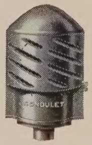
Type HNE
Section 70
Page 1

LA Series

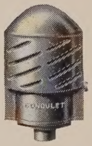
Condulets
Section 70, Page 2



Type LA
Section 70
Page 2



Type LAL
Section 70
Page 2



Type LAR
Section 70
Page 2

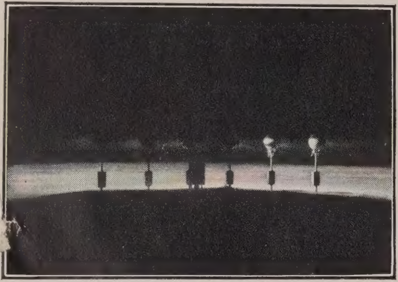
SECTION 214

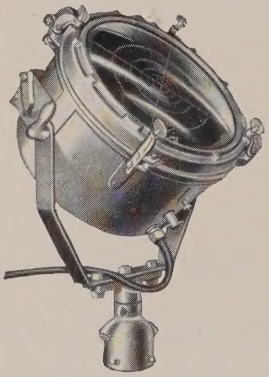
Other Crouse-Hinds Products

Description	Page
Airport and Airway Lighting Equipment	2, 3
Traffic Signals and Controls	4, 5

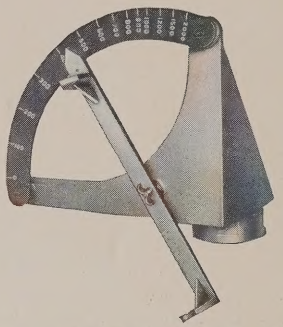
Catalogs and Bulletins will be sent upon request

Crouse-Hinds Airport and Airway Lighting Equipment

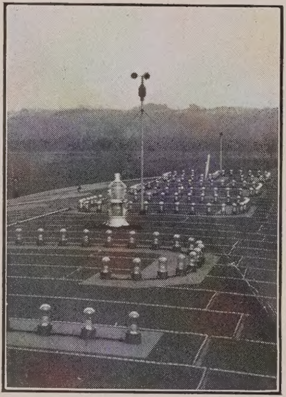


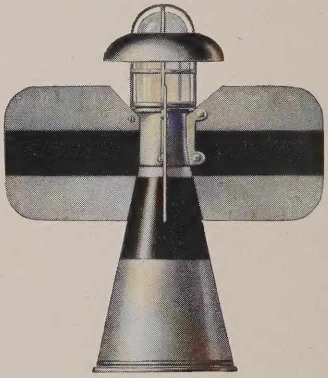


**Type DCE-14
Ceiling Projector
Slip-Fitter Base**

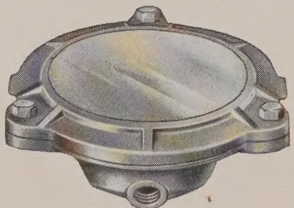


Ceiling Height Indicator

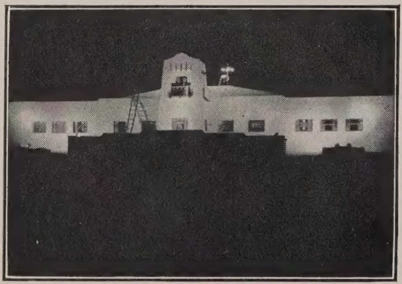


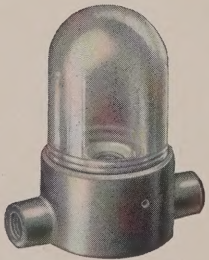


**Type APB
Disconnecting
Boundary Light
With Reflector**

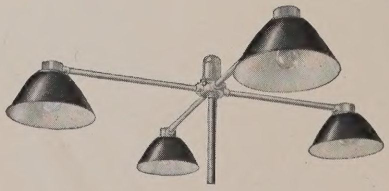


**Type APD
Flush Marker Light**



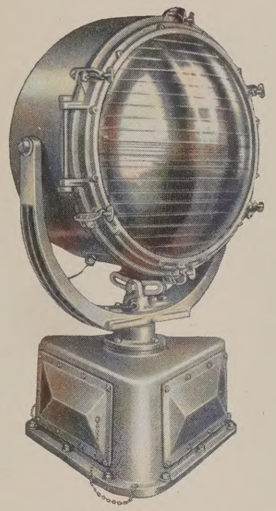


**Type HG
Sign Lighting Fitting**

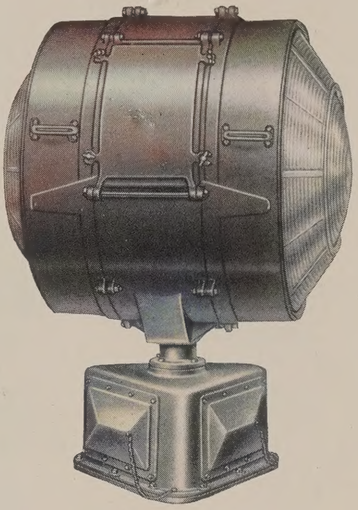


**Type APW-3
Wind Sock Lighting Fixture**

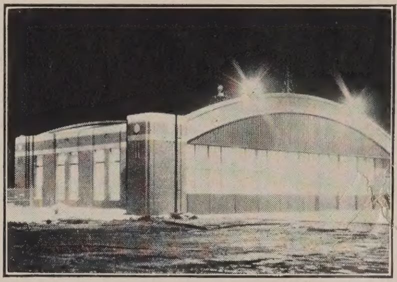
Crouse-Hinds Airport and Airway Lighting Equipment

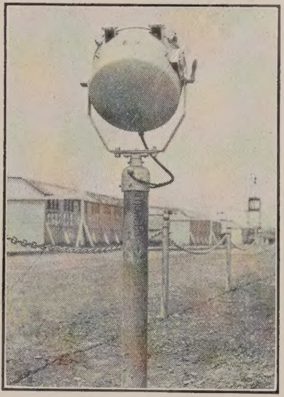


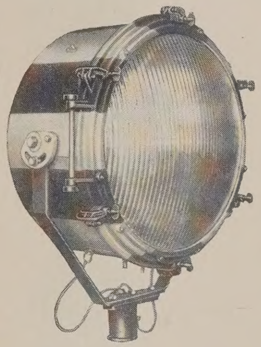
Type DCB-24
24-Inch Revolving Beacon



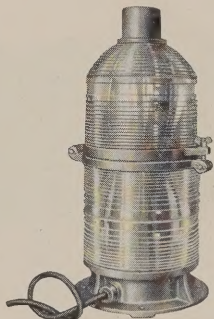
Type DCB-36
36-Inch Revolving Beacon



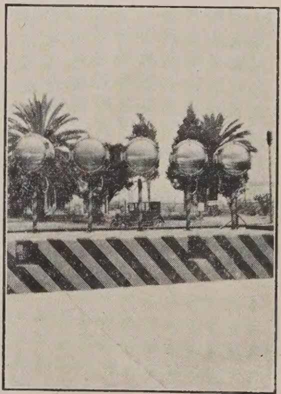


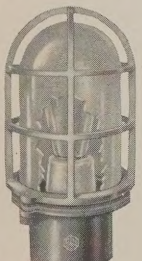


Type DCE-24
Landing Field Floodlight
3000-Watt

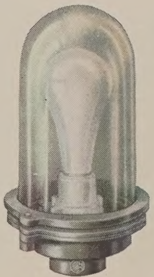


Type FCB-12 Beacon
For Flashing Code and
Marking Obstructions

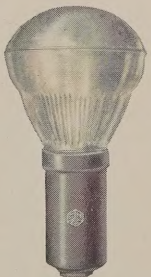




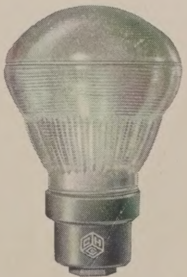
Type VAP
Series Boundary
Light



Type VAP
Multiple Boundary
Light

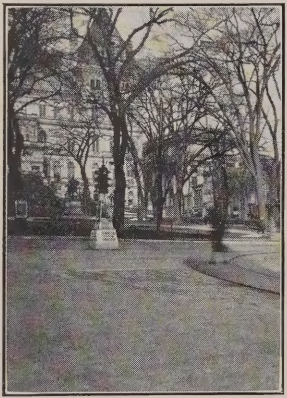


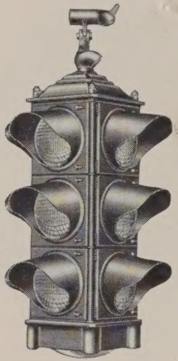
Type VAW
Series Boundary
Light



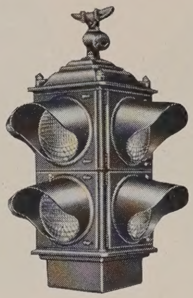
Type VAW
Multiple Boundary
Light

Crouse-Hinds Traffic Signals and Controls

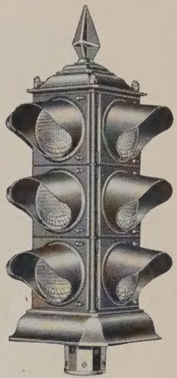




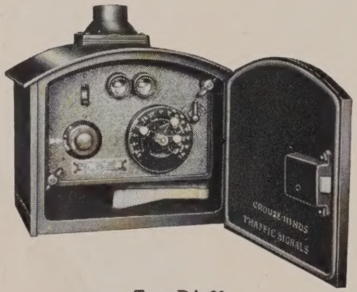
Type TIM-443D
Four-Way Signal
Mast-Arm Suspension
With Base Light



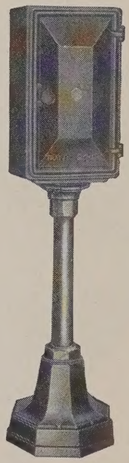
Type TSW-442D
Four-Way Signal
Span-Wire Suspension
With Type DL Timer
Mounted Underneath



Type TIP-443D
Four-Way Signal
Post Mounting
Underground Feed
With Base Light

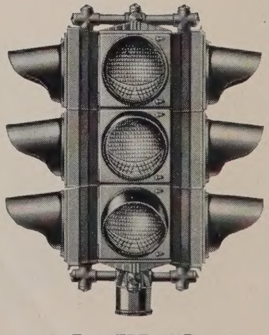


Type DA-21
Automatic Variable Timing Switch



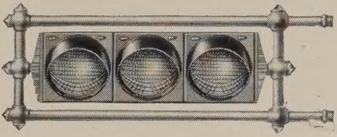
Type TFR
With Pedestal Mounting

The Crouse-Hinds Company manufactures a complete line of traffic signals and controls suitable for all traffic conditions. All signals are made of cast silicon aluminum and are substantially built. Three-color and two-color signals are available for all types of mounting: span wire, mast arm, post, pedestal, and bracket arm. All signals are equipped with the Crouse-Hinds standard optical system, consisting of an accurate glass reflector and an especially designed lens which directs the beam of light towards the oncoming stream of traffic. All colored lenses are made of high transmission glass and the colors are carefully selected for traffic signal work.

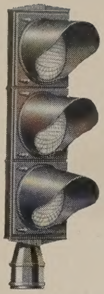


Type TRP-443D
Four-Way Adjustable Signal
Post Mounting—Underground Feed

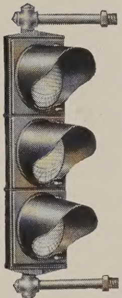
Crouse-Hinds Traffic Signals and Controls



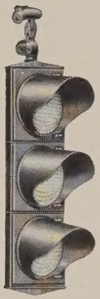
Type TSH-113D One-Way Signal
Horizontal Bracket-Arm Mounting



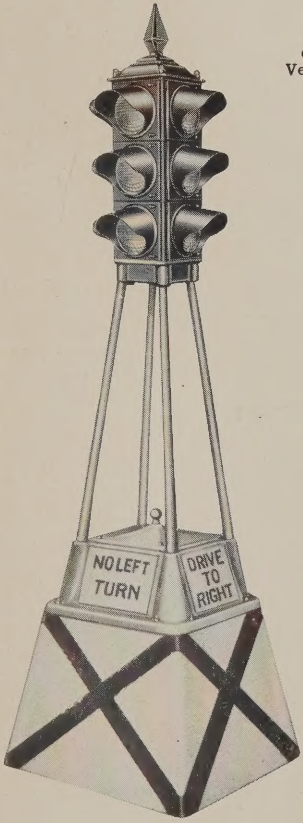
Type TSP-113D
One-Way Signal
Post Mounting



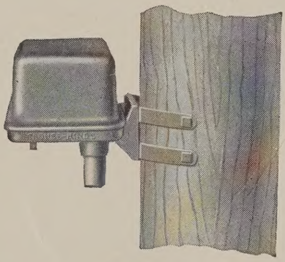
Type TSV-113D
One-Way Signal
Vertical Bracket-Arm
Mounting



Type TSM-113D
One-Way Signal
Mast-Arm
Suspension



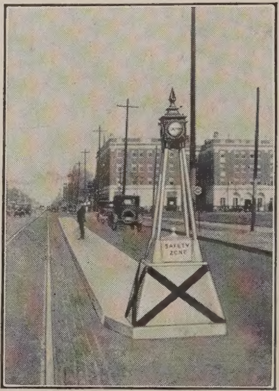
Type TSA-443D Four-Way
Automatic Isolated Signal
Pedestal Mounting—Underground Feed

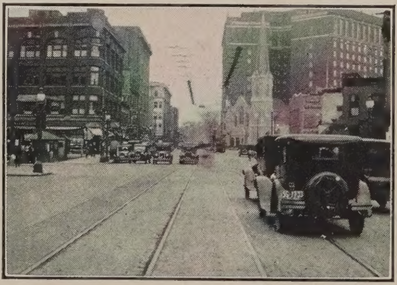


Type DL
Automatic Traffic Signal Timer
Wood Pole Mounting

The Crouse-Hinds Company manufactures a complete line of controls for all traffic conditions, from the simplest to the most complicated: variable controls for a single isolated section, synchronous controls for a progressive system without interconnecting wires, "TRAFFLEX" controls for a flexible progressive system, and the Traffic Flow Regulator with a 70-position program drum for the most complicated intersections, where the traffic flow and volume vary from hour to hour during the day.

Crouse-Hinds engineers will gladly assist you in solving your traffic problems. Consult the main office of the Crouse-Hinds Company, Syracuse, New York.





CROUSE-HINDS

[illegible]